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 His Met Glu Leu Leu Gly His Lys Glu Ala Arg Gln Arg Cys Gln
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 Phe Val Trp Glu His Leu Gln Ser Tyr Glu Gly Gln Ser Arg Gly Ala
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 1345 1350 1355 1360
 Pro Ser Met Leu Ser His Asn Ser Cys Tyr Trp Ile Gln Ser Asn Ser
 1365 1370 1375
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 Cys Lys Leu Pro Arg Ala Glu Gln Ser Ser Phe Ser Pro Ser Ala Leu
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 Pro Glu Asn Pro Ala Ala Leu Val Val Val Leu Met Ala Val Leu Leu
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 Leu Leu Ala Leu Leu Thr Ala Ala Leu Ile Leu Tyr Arg Arg Arg Gln
 1425 1430 1435 1440
 Ser Ile Glu Arg Gly Ala Phe Glu Gly Ala Arg Tyr Ser Arg Ser Ser
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 Glu Met Asn Glu Gln Gln Glu
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<210> 5831

<211> 2216

<212> DNA

<213> Homo sapiens

<400> 5831

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<210> 5832

<211> 322

<212> PRT

<213> Homo sapiens

<400> 5832

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His	Lys	Glu	Phe	Gln	Gln	Asn	Asn	Trp	His	Ala	Val	Gly	Cys	Gly	Phe
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Arg	Arg	Ala	Arg	Pro	Lys	Phe	Glu	Gln	Val	Asn	Leu	Leu	Asp	Ser	Asn
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Cys	Ala	Ala	Glu	Arg	Arg	Pro	Asp	Val	Val	Glu	Asn	Gln	Pro	Asp	Ala
			85					90					95		
Ala	Ser	Gln	Leu	Asn	Val	Asp	Ala	Ser	Gly	Asn	Leu	Ala	Lys	Glu	Ala
	100							105					110		
Ala	Ala	Val	Gly	Ala	Phe	Leu	Ile	Tyr	Ile	Ser	Ser	Asp	Tyr	Val	Phe
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Asp	Gly	Thr	Asn	Pro	Pro	Tyr	Arg	Glu	Glu	Asp	Ile	Pro	Ala	Pro	Leu
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Asn	Leu	Tyr	Gly	Lys	Thr	Lys	Leu	Asp	Gly	Glu	Lys	Ala	Val	Leu	Glu
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			165					170					175		
Val	Glu	Lys	Leu	Glu	Glu	Ser	Ala	Val	Thr	Val	Met	Phe	Asp	Lys	Val
	180							185					190		
Gln	Phe	Ser	Asn	Lys	Ser	Ala	Asn	Met	Asp	His	Trp	Gln	Gln	Arg	Phe
	195						200					205			
Pro	Thr	His	Val	Lys	Asp	Val	Ala	Thr	Val	Cys	Arg	Gln	Leu	Ala	Glu
	210					215					220				
Lys	Arg	Met	Leu	Asp	Pro	Ser	Ile	Lys	Gly	Thr	Phe	His	Trp	Ser	Gly
225				230					235					240	
Asn	Glu	Gln	Met	Thr	Lys	Tyr	Glu	Met	Ala	Cys	Ala	Ile	Ala	Asp	Ala
			245					250					255		
Phe	Asn	Leu	Pro	Ser	Ser	His	Leu	Arg	Pro	Ile	Thr	Asp	Ser	Pro	Val
	260						265					270			
Leu	Gly	Ala	Gln	Arg	Pro	Arg	Asn	Ala	Gln	Leu	Asp	Cys	Ser	Lys	Leu
	275						280					285			
Glu	Thr	Leu	Gly	Ile	Gly	Gln	Arg	Thr	Pro	Phe	Arg	Ile	Gly	Ile	Lys
	290					295					300				
Glu	Ser	Leu	Trp	Pro	Phe	Leu	Ile	Asp	Lys	Arg	Trp	Arg	Gln	Thr	Val
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Phe	His														

<210> 5833
 <211> 805
 <212> DNA
 <213> Homo sapiens

<400> 5833
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<210> 5834
 <211> 268
 <212> PRT
 <213> Homo sapiens

<400> 5834
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 Glu Gln Gln Val Glu Ser Met Thr Pro Lys Pro Val Leu Gln Glu Glu
 35 40 45
 Asn Asn Gln Glu Ser Phe Ile Ala Phe Ala Arg Val Phe Ser Gly Val
 50 55 60
 Ala Arg Arg Gly Lys Lys Ile Phe Val Leu Gly Pro Lys Tyr Ser Pro
 65 70 75 80
 Leu Glu Phe Leu Arg Arg Val Pro Leu Gly Phe Ser Ala Pro Pro Asp

85 90 95
 Gly Leu Pro Gln Val Pro His Met Ala Tyr Cys Ala Leu Glu Asn Leu
 100 105 110
 Tyr Leu Leu Met Gly Arg Glu Leu Glu Tyr Leu Glu Glu Val Pro Pro
 115 120 125
 Gly Asn Val Leu Gly Ile Gly Gly Leu Gln Asp Phe Val Leu Lys Ser
 130 135 140
 Ala Thr Leu Cys Ser Leu Pro Ser Cys Pro Pro Phe Ile Pro Leu Asn
 145 150 155 160
 Phe Glu Ala Thr Pro Ile Val Arg Val Ala Val Glu Pro Lys His Pro
 165 170 175
 Ser Glu Met Pro Gln Leu Val Lys Gly Met Lys Leu Leu Asn Gln Ala
 180 185 190
 Asp Pro Cys Val Gln Ile Leu Ile Gln Glu Thr Gly Glu His Val Leu
 195 200 205
 Val Thr Ala Gly Glu Val His Leu Gln Arg Cys Leu Asp Asp Leu Lys
 210 215 220
 Glu Arg Phe Ala Lys Ile His Ile Ser Val Ser Glu Pro Ile Ile Pro
 225 230 235 240
 Phe Arg Glu Thr Ile Thr Lys Pro Pro Lys Val Asp Met Val Asn Glu
 245 250 255
 Glu Ile Gly Lys Gln Gln Lys Val Ala Val Ile His
 260 265

<210> 5835

<211> 420

<212> DNA

<213> Homo sapiens

<400> 5835

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 180
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 240
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 300
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<210> 5836

<211> 140

<212> PRT

<213> Homo sapiens

<400> 5836

Xaa Leu Glu Gln Arg Trp Gly Phe Gly Leu Glu Glu Leu Tyr Gly Leu
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 Ala Leu Arg Phe Phe Lys Glu Lys Asp Gly Lys Ala Phe His Pro Thr

20 25 30
 Tyr Glu Glu Lys Leu Lys Leu Val Ala Leu His Lys Gln Val Leu Met
 35 40 45
 Gly Pro Tyr Asn Pro Asp Thr Cys Pro Glu Val Gly Phe Phe Asp Val
 50 55 60
 Leu Gly Asn Asp Arg Arg Arg Glu Trp Ala Ala Leu Gly Asn Met Ser
 65 70 75 80
 Lys Glu Asp Ala Met Val Glu Phe Val Lys Leu Leu Asn Arg Cys Cys
 85 90 95
 His Leu Phe Ser Thr Tyr Val Ala Ser His Lys Ile Glu Lys Glu Glu
 100 105 110
 Gln Asp Lys Lys Arg Lys Glu Glu Glu Glu Arg Arg Arg Arg Glu Glu
 115 120 125
 Glu Glu Arg Glu Arg Leu Gln Lys Glu Glu Glu Lys
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<210> 5837

<211> 582

<212> DNA

<213> Homo sapiens

<400> 5837

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 480
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<210> 5838

<211> 88

<212> PRT

<213> Homo sapiens

<400> 5838

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 Leu Ala Gln Lys Thr Asn Lys Ala Trp Ala Lys Gly Asp Ile Gln Gly

35 40 45
 Ala Gly Ala Ala Ser Arg Arg Ala Phe Leu Leu Gly Val Leu Ala Val
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 Gly Leu Gly Val Cys Thr Tyr Ala Ala Ala Leu Val Thr Leu Ala Ala
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 Tyr Leu Ala Ser Arg Asp Pro Pro
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<210> 5839

<211> 1895

<212> DNA

<213> Homo sapiens

<400> 5839

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 120
 cattcgaatg catccaacc agtgctcagc tgcgtaacga catggagaga ggcagggggg
 180
 aatagaaagc aaatttaaaa acaccaacac ccaaacacac aagactgcac acaagaaaaa
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 1200

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<210> 5840

<211> 138

<212> PRT

<213> Homo sapiens

<400> 5840

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			20					25					30		
Leu	Met	Val	His	Gly	Trp	Cys	Pro	Val	Ile	Phe	Ser	Trp	Ala	Val	Ala
		35				40						45			
Pro	Arg	Gly	Ser	Gly	Phe	Pro	Ala	Gln	Gly	Ile	Phe	Asp	Pro	Cys	Gln
	50				55					60					
Arg	Arg	Glu	Arg	Glu	Leu	Ser	Trp	Phe	Pro	Phe	His	Leu	Phe	Ser	Gly
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Cys	Phe	Lys	Ala	Asn	Ile	Pro	Val	Pro	Asn	Val	Leu	Cys	Gly	Leu	Asn
			85					90				95			
Pro	Gly	Arg	Gly	Gln	Gly	His	Ile	Gln	Val	Gly	Leu	Ala	Ser	Ser	Thr
			100					105				110			
Thr	Phe	Trp	Pro	Gln	Gln	Arg	Met	Gly	Phe	His	Gln	Ser	Leu	Ser	Thr
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<210> 5841

<211> 3411

<212> DNA

<213> Homo sapiens

<400> 5841

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<210> 5846

<211> 257

<212> PRT

<213> Homo sapiens

<400> 5846

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Val	Met	Glu	Glu	Leu	Gln	Arg	His	His	Glu	Arg	Glu	Leu	Gln	Arg	Leu
			20					25					30		
Gln	Gln	Glu	Lys	Glu	Trp	Leu	Leu	Ala	Glu	Glu	Thr	Ala	Ala	Thr	Ala
			35				40					45			
Ser	Ala	Ile	Glu	Ala	Met	Lys	Lys	Ala	Tyr	Gln	Glu	Glu	Leu	Ser	Arg
	50					55					60				
Glu	Leu	Ser	Lys	Thr	Arg	Ser	Leu	Gln	Gln	Gly	Pro	Asp	Gly	Leu	Arg
	65				70				75					80	
Lys	Gln	His	Gln	Ser	Asp	Val	Glu	Ala	Leu	Lys	Arg	Glu	Leu	Gln	Val
			85					90						95	
Leu	Ser	Glu	Gln	Tyr	Ser	Gln	Lys	Cys	Leu	Glu	Ile	Gly	Ala	Leu	Met
			100					105					110		
Arg	Gln	Ala	Glu	Glu	Arg	Glu	His	Thr	Leu	Arg	Arg	Cys	Gln	Gln	Glu
	115					120						125			
Gly	Gln	Glu	Leu	Leu	Arg	His	Asn	Gln	Glu	Leu	His	Gly	Arg	Leu	Ser
	130				135						140				
Glu	Glu	Ile	Asp	Gln	Leu	Arg	Gly	Phe	Ile	Ala	Ser	Gln	Gly	Met	Gly
	145			150					155					160	
Asn	Gly	Cys	Gly	Arg	Ser	Asn	Glu	Arg	Ser	Ser	Cys	Glu	Leu	Glu	Val
			165				170						175		
Leu	Leu	Arg	Val	Lys	Glu	Asn	Glu	Leu	Gln	Tyr	Leu	Lys	Lys	Glu	Val
			180				185						190		
Gln	Cys	Leu	Arg	Asp	Glu	Leu	Gln	Met	Met	Gln	Lys	Asp	Lys	Arg	Phe
	195					200					205				
Thr	Ser	Gly	Lys	Tyr	Gln	Asp	Val	Tyr	Val	Glu	Leu	Ser	His	Ile	Lys

210	215	220
Thr Arg Ser Glu Arg Glu Ile Glu Gln Leu Lys Glu His Leu Arg Leu		
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Ala Met Ala Ala Leu Gln Glu Lys Glu Ser Met Arg Asn Ser Leu Ala		240
	245	250
		255

Glu

<210> 5847
 <211> 1021
 <212> DNA
 <213> Homo sapiens

<400> 5847
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 120
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 180
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 240
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 300
 aggcggggtc ggtggtacgt ctactgtaa acccatccga ggcacaagca gagacagatg
 360
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 420
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 480
 gccctaaaag ttacccatca cgtttcagtg taaatgagta actatagaag acattgcgtt
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<210> 5848
 <211> 120
 <212> PRT

<213> Homo sapiens

<400> 5848

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 20 25 30
 Leu Ser Arg His Thr Val Lys Pro Arg Ala Leu Ser Thr Phe Leu Phe
 35 40 45
 Gly Ser Ile Arg Gly Ala Ala Pro Val Ala Val Glu Pro Gly Ala Ala
 50 55 60
 Val Arg Ser Leu Leu Ser Pro Gly Leu Leu Pro His Leu Leu Pro Ala
 65 70 75 80
 Leu Gly Phe Lys Asn Lys Thr Val Leu Lys Lys Arg Cys Lys Asp Cys
 85 90 95
 Tyr Leu Val Lys Arg Arg Gly Arg Trp Tyr Val Tyr Cys Lys Thr His
 100 105 110
 Pro Arg His Lys Gln Arg Gln Met
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<210> 5849

<211> 3174

<212> DNA

<213> Homo sapiens

<400> 5849

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 120
 aaaaatctca agaccacagg acagcgtgag cccaccccc ctcccccaat gacccagca
 180
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 240
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 420
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 480
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 600
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 660
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 720
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 840

gccaaaawyy mmttggtttt ttaaaaaata atcacaattt gtgggttaaa aaccaatttg
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<210> 5850

<211> 154

<212> PRT

<213> Homo sapiens

<400> 5850

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His	Ser	Val	Pro	Ala	Tyr	Pro	Trp	Asp	Trp	Gly	His	Leu	Ile	Arg	Phe
		20						25					30		
Cys	Thr	Gln	Thr	Gly	His	Ala	Gln	Pro	Cys	Pro	Ser	Ala	Pro	Ser	Thr
		35					40					45			
Gly	Pro	Ile	His	Ile	Ala	Glu	Gly	Gly	Arg	Gly	Arg	Pro	Pro	Pro	Gly
		50				55					60				
Ser	Ala	Ser	Asn	Pro	Gln	Pro	Pro	Gly	Ser	Pro	His	Cys	Pro	Ser	Ala
		65			70				75					80	
Gly	Leu	Ser	Pro	Val	Pro	Gly	Val	Gly	Gly	Arg	Gln	Cys	Pro	Gly	Thr
			85					90						95	
Val	Pro	Arg	Val	Arg	Arg	Pro	Gly	Leu	Ala	Gly	His	Pro	Val	Thr	His
		100					105						110		
Arg	Ile	Asn	Arg	Lys	Thr	Ala	Ser	Pro	Pro	Asn	Leu	Cys	Pro	Arg	His
		115				120						125			
Asn	Met	Ser	Arg	Ser	Glu	Ser	Cys	Thr	Pro	Arg	Ser	Arg	Ala	Pro	Leu
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Gln	Arg	Thr	Leu	Thr	Pro	Pro	Arg	Gly	Ala						
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<210> 5851

<211> 488

<212> DNA

<213> Homo sapiens

<400> 5851

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 180
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 360
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 tgacgcgt
 488

<210> 5852

<211> 82

<212> PRT

<213> Homo sapiens

<400> 5852

Met	Trp	Lys	Gly	Leu	Val	Lys	Arg	Asn	Ala	Ser	Val	Glu	Thr	Val	Asp
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Asn	Lys	Thr	Ser	Glu	Asp	Val	Thr	Met	Ala	Ala	Ala	Ser	Pro	Val	Thr
			20					25					30		
Leu	Thr	Lys	Gly	Thr	Ser	Ala	Ala	His	Leu	Asn	Ser	Met	Glu	Val	Thr
		35					40				45				
Thr	Glu	Asp	Thr	Ser	Arg	Thr	Asp	Ala	Tyr	Glu	Ser	Tyr	Lys	Lys	Lys
	50					55				60					
Asp	Tyr	Thr	Gln	Val	Asp	Tyr	Leu	Ile	Asn	Gly	Met	Tyr	Ala	Asp	Ser
65					70					75				80	
Glu	Met														

<210> 5853

<211> 487

<212> DNA

<213> Homo sapiens

<400> 5853

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 487

<210> 5854

<211> 68

<212> PRT

<213> Homo sapiens

<400> 5854

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 20 25 30
 Thr Pro Ser Gly Arg Ser Gly Pro Ala Ala Pro Trp Arg Thr Pro Ala
 35 40 45
 Arg Thr Pro Pro Arg Leu Leu Pro Thr Leu Cys Pro Val Thr Pro Val
 50 55 60
 Ser Trp Pro Leu
 65

<210> 5855

<211> 362

<212> DNA

<213> Homo sapiens

<400> 5855

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 180
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 360
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 362

<210> 5856

<211> 113

<212> PRT

<213> Homo sapiens

<400> 5856

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 Val Thr Ala Pro Leu Cys Ser Ala Asp Pro Leu Leu Ala Val Pro Pro
 20 25 30
 Ser Pro Pro Asp Pro Pro Ala Gly Thr Cys Trp Gly Leu Trp Gly Pro
 35 40 45
 Lys Arg Glu Gly Val Asn Glu Val Val Ala Glu Val Leu Leu Ala Ala
 50 55 60
 His Glu Gly Val Gly Asp Gln Gly Glu Ala Gly Ala His Pro Val Leu
 65 70 75 80
 Ser Asp Ala Gly Leu Leu Val Leu Gly Leu Arg Ala Ala Leu Gly Glu
 85 90 95
 His Gln Ala His Leu Gly Ser Ala Leu Asn Glu His Gln Arg Val Leu
 100 105 110
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<210> 5857

<211> 1751

<212> DNA

<213> Homo sapiens

<400> 5857

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 1740
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 1751

<210> 5858

<211> 434

<212> PRT

<213> Homo sapiens

<400> 5858

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Gly	Arg	Pro	Ser	Arg	Gly	Arg	Pro	Pro	Lys	Leu	Gln	Arg	Asn	Ser	Arg
		20					25						30		
Gly	Gly	Gln	Gly	Arg	Gly	Gly	Glu	Lys	Pro	Pro	His	Leu	Ala	Ala	Leu
		35				40						45			
Ile	Leu	Ala	Arg	Gly	Gly	Ser	Lys	Gly	Ile	Pro	Leu	Lys	Asn	Ile	Lys
	50				55					60					
His	Leu	Ala	Gly	Val	Pro	Leu	Ile	Gly	Trp	Val	Leu	Arg	Ala	Ala	Leu
65				70				75						80	
Asp	Ser	Gly	Ala	Phe	Gln	Ser	Val	Trp	Val	Ser	Thr	Asp	His	Asp	Glu
		85					90					95			
Ile	Glu	Asn	Val	Ala	Lys	Gln	Phe	Gly	Ala	Gln	Val	His	Arg	Arg	Ser
		100					105					110			
Ser	Glu	Val	Ser	Lys	Asp	Ser	Ser	Thr	Ser	Leu	Asp	Ala	Ile	Ile	Glu

115	120	125
Phe Leu Asn Tyr His Asn Glu Val Asp Ile Val Gly Asn Ile Gln Ala		
130	135	140
Thr Ser Pro Cys Leu His Pro Thr Asp Leu Gln Lys Val Ala Glu Met		
145	150	155
Ile Arg Glu Glu Gly Tyr Asp Ser Val Phe Ser Val Val Arg Arg His		
165	170	175
Gln Phe Arg Trp Ser Glu Ile Gln Lys Gly Val Arg Glu Val Thr Glu		
180	185	190
Pro Leu Asn Leu Asn Pro Ala Lys Arg Pro Arg Arg Gln Asp Trp Asp		
195	200	205
Gly Glu Leu Tyr Glu Asn Gly Ser Phe Tyr Phe Ala Lys Arg His Leu		
210	215	220
Ile Glu Met Gly Tyr Leu Gln Gly Gly Lys Met Ala Tyr Tyr Glu Met		
225	230	235
Arg Ala Glu His Ser Val Asp Ile Asp Val Asp Ile Asp Trp Pro Ile		
245	250	255
Ala Glu Gln Arg Val Leu Arg Tyr Gly Tyr Phe Gly Lys Glu Lys Leu		
260	265	270
Lys Glu Ile Lys Leu Leu Val Cys Asn Ile Asp Gly Cys Leu Thr Asn		
275	280	285
Gly His Ile Tyr Val Ser Gly Asp Gln Lys Glu Ile Ile Ser Tyr Asp		
290	295	300
Val Lys Asp Ala Ile Gly Ile Ser Leu Leu Lys Lys Ser Gly Ile Glu		
305	310	315
Val Arg Leu Ile Ser Glu Arg Ala Cys Ser Lys Gln Thr Leu Ser Ser		
325	330	335
Leu Lys Leu Asp Cys Lys Met Glu Val Ser Val Ser Asp Lys Leu Ala		
340	345	350
Val Val Asp Glu Trp Arg Lys Glu Met Gly Leu Cys Trp Lys Glu Val		
355	360	365
Ala Tyr Leu Gly Asn Glu Val Ser Asp Glu Glu Cys Leu Lys Arg Val		
370	375	380
Gly Leu Ser Gly Ala Pro Ala Asp Ala Cys Ser Thr Ala Gln Lys Ala		
385	390	395
Val Gly Tyr Ile Cys Lys Cys Asn Gly Gly Arg Gly Ala Ile Arg Glu		
405	410	415
Phe Ala Glu His Ile Cys Leu Leu Met Glu Lys Val Asn Asn Ser Cys		
420	425	430
Gln Lys		

<210> 5859

<211> 2267

<212> DNA

<213> Homo sapiens

<400> 5859

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aaatatatat ataaaaaaaa taataagaca attacagcac taaaccaggc accttcgacc
120

aaatcacaac ctctctcttg attcccttc acgctaagcc tctttcaaatt tcttttctct
180

gagctggaag accagtcaga tgccgcagg gtcagcgcca agcacattcc caaccgggca
240
actgtgtacc tttctctagg agtgcacgac acccttcccc cacaactcct tgttttaaaag
300
gatttaaccc attaggaagc ccatgtttca atctaagcca gaaggagctg cgggacaag
360
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420
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480
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540
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780
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1680
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1800

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 2160
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 2267

<210> 5860

<211> 96

<212> PRT

<213> Homo sapiens

<400> 5860

Met	Glu	Glu	Glu	Ser	Pro	Phe	Thr	Gln	Lys	Lys	Cys	Pro	Leu	Gln	Glu
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Pro	Ala	Ala	Ala	Arg	Gln	Ser	Pro	Ala	Arg	Leu	His	Pro	Lys	Ser	Arg
				20				25					30		
Ser	Arg	Ala	Ser	Glu	Ala	Ser	Gly	Ser	Leu	Leu	Leu	Arg	Phe	Phe	Leu
			35				40					45			
Gln	Met	Gly	Leu	Gly	Arg	Cys	Arg	Phe	Cys	Phe	Ser	Pro	Trp	Leu	Pro
	50					55					60				
Val	Arg	Pro	Gln	Pro	Ser	Gly	Cys	Asp	Ile	Ile	Glu	Ser	Ala	Val	Ser
65					70				75					80	
Pro	Leu	Val	Gly	Asp	Trp	Gly	Ser	Val	Phe	Ser	His	Leu	Tyr	Leu	Leu
				85					90					95	

<210> 5861

<211> 1951

<212> DNA

<213> Homo sapiens

<400> 5861

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 180
 aagctatttg agaaagtcaa agaagtttgt ccaaattgtgc atgagaagat cagagctatt
 240
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 300
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 360

catgctgtgc aacttaacgt cactgccacc cggcagctct tgcttatggc tagtcagatg
420
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480
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540
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600
aatatttata cctacaccaa ggccttggga gaaatggtgg tgcagcaaga gagcaggaac
660
ctgaacattg ccatcataag gccctccatt gtgggagcaa cttggcagga gcctttccca
720
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780
cttcgggcca taaaagctac tccaatggct gtggcagacg taattccagt tgatacagtc
840
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900
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1920
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1951

<210> 5862

<211> 514

<212> PRT

<213> Homo sapiens

<400> 5862

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 20 25 30
 Pro Asp Leu Lys Val Ile Tyr Ile Leu Val Arg Pro Lys Ala Gly Gln
 35 40 45
 Thr Leu Gln Gln Arg Val Phe Gln Ile Leu Asp Ser Lys Leu Phe Glu
 50 55 60
 Lys Val Lys Glu Val Cys Pro Asn Val His Glu Lys Ile Arg Ala Ile
 65 70 75 80
 Tyr Ala Asp Leu Asn Gln Asn Asp Phe Ala Ile Ser Lys Glu Asp Met
 85 90 95
 Gln Glu Leu Leu Ser Cys Thr Asn Ile Ile Phe His Cys Ala Ala Thr
 100 105 110
 Val Arg Phe Asp Asp Thr Leu Arg His Ala Val Gln Leu Asn Val Thr
 115 120 125
 Ala Thr Arg Gln Leu Leu Leu Met Ala Ser Gln Met Pro Lys Leu Glu
 130 135 140
 Ala Phe Ile His Ile Ser Thr Ala Tyr Ser Asn Cys Asn Leu Lys His
 145 150 155 160
 Ile Asp Glu Val Ile Tyr Pro Cys Pro Val Glu Pro Lys Lys Lys Ile
 165 170 175
 Ile Asp Ser Leu Glu Trp Leu Asp Asp Ala Ile Ile Asp Glu Ile Thr
 180 185 190
 Pro Lys Leu Ile Arg Asp Trp Pro Asn Ile Tyr Thr Tyr Thr Lys Ala
 195 200 205
 Leu Gly Glu Met Val Val Gln Glu Ser Arg Asn Leu Asn Ile Ala
 210 215 220
 Ile Ile Arg Pro Ser Ile Val Gly Ala Thr Trp Gln Glu Pro Phe Pro
 225 230 235 240
 Gly Trp Val Asp Asn Ile Asn Gly Pro Asn Gly Ile Ile Ile Ala Thr
 245 250 255
 Gly Lys Gly Phe Leu Arg Ala Ile Lys Ala Thr Pro Met Ala Val Ala
 260 265 270
 Asp Val Ile Pro Val Asp Thr Val Val Asn Leu Met Leu Ala Val Gly
 275 280 285
 Trp Tyr Thr Ala Val His Arg Pro Lys Ser Thr Leu Val Tyr His Ile
 290 295 300
 Thr Ser Gly Asn Met Asn Pro Cys Asn Trp His Lys Met Gly Val Gln
 305 310 315 320
 Val Leu Ala Thr Phe Glu Lys Ile Pro Phe Glu Arg Pro Phe Arg Arg
 325 330 335
 Pro Asn Ala Asn Phe Thr Ser Asn Ser Phe Thr Ser Gln Tyr Trp Asn
 340 345 350
 Ala Val Ser His Arg Ala Pro Ala Ile Ile Tyr Asp Cys Tyr Leu Arg
 355 360 365
 Leu Thr Gly Arg Lys Pro Arg Met Thr Lys Leu Met Asn Arg Leu Leu

370 375 380
 Arg Thr Val Ser Met Leu Glu Tyr Phe Ile Asn Arg Ser Trp Glu Trp
 385 390 395 400
 Ser Thr Tyr Asn Thr Glu Met Leu Met Ser Glu Leu Ser Pro Glu Asp
 405 410 415
 Gln Arg Val Phe Asn Phe Asp Val Arg Gln Leu Asn Trp Leu Glu Tyr
 420 425 430
 Ile Glu Asn Tyr Val Leu Gly Val Lys Lys Tyr Leu Leu Lys Glu Asp
 435 440 445
 Met Ala Gly Ile Pro Lys Ala Lys Gln Arg Leu Lys Arg Leu Arg Asn
 450 455 460
 Ile His Tyr Leu Phe Asn Thr Ala Leu Phe Leu Ile Ala Trp Arg Leu
 465 470 475 480
 Leu Ile Ala Arg Ser Gln Met Ala Arg Asn Val Trp Phe Phe Ile Val
 485 490 495
 Ser Phe Cys Tyr Lys Phe Leu Ser Tyr Phe Arg Ala Ser Ser Thr Leu
 500 505 510
 Lys Val

<210> 5863

<211> 438

<212> DNA

<213> Homo sapiens

<400> 5863

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 120
 agaagtgcga gtcttaacat tcaactgtttg tgactgattt atagaaaaag gggctggatt
 180
 ctggtagccg ggggagccca ggggtgaacac tgaggttcta ccctgttcta gtggttgctt
 240
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 300
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 420
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 438

<210> 5864

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5864

Met Gly Glu Lys Asn Lys Gln Leu Gln Ile Arg His Cys Leu Ser Pro
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 Asp Cys Ser Leu Pro Val Gly Gln Thr His Ser Asn Thr Lys Leu Phe
 20 25 30
 Cys Gln Tyr Leu Ser Tyr Val Pro Phe Met Ala Glu Tyr Gln Ser Lys

35 40 45
 Gln Pro Leu Glu Gln Gly Arg Thr Ser Val Phe Thr Leu Gly Ser Pro
 50 55 60
 Gly Tyr Gln Asn Pro Ala Pro Phe Ser Ile Asn Gln Ser Gln Thr Val
 65 70 75 80
 Asn Val Lys Thr Gly Thr Ser Cys Leu Glu Thr Gln Ile Leu Phe Gln
 85 90 95
 Glu Glu Tyr Leu Arg Ile Phe Leu
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<210> 5865

<211> 1229

<212> DNA

<213> Homo sapiens

<400> 5865

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 120
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<210> 5866
 <211> 212
 <212> PRT
 <213> Homo sapiens

<400> 5866
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 20 25 30
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 35 40 45
 Phe Val Leu Pro Thr Glu Gln Phe His Leu Gly Lys Ile Glu Glu Leu
 50 55 60
 Leu Val Glu Arg Thr Gly Ala Pro Phe Cys Ser Pro Thr Ser Ser Gly
 65 70 75 80
 Trp Arg Arg Ser Arg Ala Ser Ala Ile Ala Ala Gly Val His Pro Gln
 85 90 95
 Asp Ala Met Arg Ser Val Thr Lys Gln Ala Ile Arg Glu Ala Arg Leu
 100 105 110
 Lys Glu Ile Lys Glu Glu Leu Leu His Ser Glu Lys Leu Lys Thr Tyr
 115 120 125
 Phe Glu Asp Asn Pro Arg Asp Leu Gln Leu Leu Arg His Asp Leu Pro
 130 135 140
 Leu His Pro Ala Val Val Lys Pro His Leu Gly His Val Pro Asp Tyr
 145 150 155 160
 Leu Val Pro Pro Ala Leu Arg Gly Leu Val Arg Pro His Lys Lys Arg
 165 170 175
 Lys Lys Leu Ser Ser Ser Cys Arg Lys Ala Lys Arg Ala Lys Ser Gln
 180 185 190
 Asn Pro Leu Arg Ser Phe Lys His Lys Gly Lys Lys Phe Arg Pro Thr
 195 200 205
 Ala Lys Pro Ser
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<210> 5867
 <211> 1882
 <212> DNA
 <213> Homo sapiens

<400> 5867
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 180
 ggccaacagc gcccggtggct tccagattcc ctatgttacc tatgatgagg actatgagca
 240

gctggtagaa gacattgtgc gagatggccg gctctatgcc tctgaaaacc accaggagat
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420
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480
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600
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660
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720
gtaaagaaac agtacagccc cttccactgc ccattttacc agctcacatt cccgacccca
780
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1380
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1620
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1740
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1860

gtggtaatca catgggtaat tg
1882

<210> 5868
<211> 131
<212> PRT
<213> Homo sapiens

<400> 5868
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Gln Thr Tyr Glu Arg Pro Ile Ala Phe Thr Ala Arg Ser Arg Lys Leu
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Trp Ile Asn Phe Lys Thr Ser Glu Ala Asn Ser Ala Arg Gly Phe Gln
35 40 45
Ile Pro Tyr Val Thr Tyr Asp Glu Asp Tyr Glu Gln Leu Val Glu Asp
50 55 60
Ile Val Arg Asp Gly Arg Leu Tyr Ala Ser Glu Asn His Gln Glu Ile
65 70 75 80
Leu Lys Asp Lys Lys Leu Ile Lys Ala Phe Phe Glu Val Leu Ala His
85 90 95
Pro Gln Asn Tyr Phe Lys Tyr Thr Glu Lys His Lys Glu Met Leu Pro
100 105 110
Lys Ser Phe Ile Lys Leu Leu Arg Ser Lys Val Ser Ser Phe Leu Arg
115 120 125
Pro Tyr Lys
130

<210> 5869
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<212> DNA
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<213> Homo sapiens

<400> 5872

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Phe	Thr	His	Asp	Asp	Gly	Tyr	Met	Ile	Cys	Cys	Asp	Lys	Cys	Ser	Val
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<212> DNA

<213> Homo sapiens

<400> 5873

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<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 5876

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 Val Thr Ser Gly Leu Thr Tyr Ile Lys Ile Gln Leu Val Lys Ala Glu
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Tyr	Cys	Gly	Met	His	Ser	Pro	Asn	Ile	Glu	Val	Val	Leu	Val	Lys ile
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Gly	Leu	Gln	Ser	Thr	Arg	Ile	Gly	Leu	Lys	Leu	Ile	Asp	Ile	Leu Leu
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Arg	Asn	Cys	Ala	Ala	Ser	Gly	Ser	Asp	Pro	Thr	Asp	Leu	Asn	Ser Pro
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Phe	Cys	Phe	Ser	His	Ile	Ser	Ser	Ser	Glu	Ser	Ile	Ala	Gln	Ser Ile
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<213> Homo sapiens

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<211> 227

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<400> 5879

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<210> 5880
 <211> 185
 <212> PRT
 <213> Homo sapiens

<400> 5880

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      20           25           30
Gly Ser Gln Lys Lys Lys Arg Thr Ile Leu Gln Phe Leu Thr Asn Tyr
      35           40           45
Phe Tyr Asp Val Glu Ala Leu Arg Asp Tyr Leu Leu Gln Arg Glu Met
      50           55           60
Tyr Lys Val His Glu Lys Asn Arg Ser Tyr Thr Trp Leu Glu Lys Gln
      65           70           75           80
His Gly Pro Tyr Gly Ala Gly Ala Phe Phe Ile Leu Lys Gln Gly Gly
      85           90           95
Ala Val Lys Phe Arg Asp Lys Glu Trp Ile Arg Pro Asp Lys Tyr Gly
      100          105          110
His Phe Ser Gln Glu Phe Trp Asn Phe Cys Glu Val Pro Val Glu Ala
      115          120          125
Val Asp Ala Gly Asp Cys Asp Ile Asn Tyr Glu Gly Leu Asp Asn Leu
      130          135          140
Arg Thr Ser Ala Gly Trp Thr Ser Arg Thr Ser Leu Pro Cys Pro Thr
      145          150          155          160
Leu Ala Ser Leu Arg Tyr Trp Trp Arg Arg Cys Cys Pro Ile Ala Arg
      165          170          175
Leu Trp Glu Ser Thr Gly Leu Arg Ala
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<210> 5881
 <211> 327
 <212> DNA
 <213> Homo sapiens

<400> 5881

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<210> 5882
 <211> 109
 <212> PRT

<213> Homo sapiens

<400> 5882

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Ala Lys Glu Asn Met Val Thr Phe Ser His Thr Leu Pro Arg Ala Ser
             35             40             45
Ala Pro Ser Leu Asp Asp Pro Ala Arg Arg His Met Thr Ile His Val
             50             55             60
Pro Leu Asp Ala Ser Arg Ser Lys Gln Leu Ile Ser Glu Trp Lys Gln
65             70             75             80
Lys Ser Leu Glu Gly Arg Gly Leu Gly Leu Pro Asp Asp Ala Ser Pro
             85             90             95
Gly His Leu Arg Ala Pro Ala Glu Pro Met Pro Glu Xaa
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<210> 5883

<211> 579

<212> DNA

<213> Homo sapiens

<400> 5883

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240
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<210> 5884

<211> 71

<212> PRT

<213> Homo sapiens

<400> 5884

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Met Gly Asn Gly Thr Glu Glu Asp Tyr Asn Phe Val Phe Lys Val Val
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Leu Ile Gly Glu Ser Gly Val Gly Lys Thr Asn Leu Leu Ser Arg Phe

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	20		25		30										
Thr	Arg	Asn	Glu	Phe	Ser	His	Asp	Ser	Arg	Thr	Thr	Ile	Gly	Val	Glu
	35					40					45				
Phe	Ser	Thr	Arg	Thr	Val	Met	Leu	Gly	Thr	Ala	Ala	Val	Lys	Ala	Gln
	50					55					60				
Ile	Trp	Asp	Thr	Ala	Gly	Val									
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<210> 5885

<211> 1905

<212> DNA

<213> Homo sapiens

<400> 5885

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1200

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<210> 5886

<211> 265

<212> PRT

<213> Homo sapiens

<400> 5886

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		20					25					30			
Gly	Ala	Gly	Pro	Leu	Tyr	Ser	His	His	Leu	Pro	Thr	Ser	Pro	Leu	Gln
	35					40					45				
Lys	Ala	Leu	Leu	Ala	Ala	Gly	Ser	Ala	Ala	Met	Ala	Leu	Tyr	Asn	Pro
	50				55					60					
Tyr	Arg	His	Asp	Met	Val	Ala	Val	Leu	Gly	Glu	Thr	Thr	Gly	His	Arg
65				70					75					80	
Thr	Leu	Lys	Val	Leu	Arg	Asp	Gln	Met	Arg	Arg	Asp	Pro	Glu	Gly	Ala
			85					90					95		
Gln	Ile	Leu	Gln	Glu	Arg	Pro	Arg	Ile	Ser	Thr	Ser	Thr	Leu	Asp	Leu
		100						105					110		
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Arg	Phe	Val	Asp	Asp	Glu	Leu	Ala	Tyr	Val	Ile	Gln	Arg	Tyr	Arg	
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Glu	Val	His	Asp	Met	Leu	His	Thr	Leu	Leu	Gly	Met	Pro	Thr	Asn	Ile
			165					170						175	
Leu	Gly	Glu	Ile	Val	Val	Lys	Trp	Phe	Glu	Ala	Val	Gln	Thr	Gly	Leu

	180		185		190
Pro Met Cys Ile Leu Gly Ala Phe Phe Gly Pro Ile Arg Leu Gly Ala					
195		200		205	
Gln Ser Leu Gln Val Leu Val Ser Glu Leu Ile Pro Trp Ala Val Gln					
210		215		220	
Asn Gly Arg Arg Ala Pro Cys Val Leu Asn Leu Tyr Tyr Glu Arg Arg					
225		230		235	240
Trp Glu Gln Ser Leu Arg Ala Leu Arg Glu Glu Leu Gly Ile Thr Ala					
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Pro Pro Met His Val Gln Gly Leu Ala					
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<210> 5887

<211> 3779

<212> DNA

<213> Homo sapiens

<400> 5887

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<210> 5888

<211> 166

<212> PRT

<213> Homo sapiens

<400> 5888

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Glu	Asp	Arg	Asp	Thr	Val	Val	Glu	Gly	Leu	Arg	Arg	Leu	Ser	Asp	Tyr
		20					25					30			
Pro	Glu	Tyr	Met	Trp	Phe	Leu	Tyr	Cys	Glu	Gly	Thr	Arg	Phe	Thr	
		35				40					45				
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	50					55					60				
Pro	Val	Leu	Lys	Tyr	His	Leu	Leu	Pro	Arg	Thr	Lys	Gly	Phe	Thr	Thr
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1080

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<210> 5890

<211> 118

<212> PRT

<213> Homo sapiens

<400> 5890

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 35 40 45
 Ser Ser His Ser Pro Thr Ser Ala Ser Gln Ala Val Gly Thr Thr Gly
 50 55 60
 Glu Glu Arg Gln Gln His Gly Glu Cys Pro Val Pro Thr Pro Trp Lys

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<210> 5891

<211> 1459

<212> DNA

<213> Homo sapiens

<400> 5891

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1200

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<210> 5892

<211> 212

<212> PRT

<213> Homo sapiens

<400> 5892

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Phe	Arg	Asn	Gly	Ala	Val	Tyr	Gly	Ala	Lys	Ile	Arg	Ala	Pro	His	Ala
		35					40				45				
Leu	Val	Met	Thr	Phe	Leu	Phe	Arg	Asn	Gly	Ser	Leu	Gln	Glu	Lys	Leu
	50					55					60				
Trp	Ala	Ile	Leu	Gln	Ala	Thr	Tyr	Ile	His	Ser	Trp	Asn	Leu	Ala	Arg
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Phe	Val	Phe	Thr	Tyr	Lys	Gly	Leu	Arg	Ala	Leu	Gln	Ser	Tyr	Ile	Gln
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Gly	Lys	Thr	Tyr	Pro	Ala	His	Ala	Phe	Leu	Ala	Ala	Phe	Leu	Gly	Gly
		100						105					110		
Ile	Leu	Val	Phe	Gly	Glu	Asn	Asn	Asn	Ile	Asn	Ser	Gln	Ile	Asn	Met
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Tyr	Leu	Leu	Ser	Arg	Val	Leu	Phe	Ala	Leu	Ser	Arg	Leu	Ala	Val	Glu
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Lys	Gly	Tyr	Ile	Pro	Glu	Pro	Arg	Trp	Asp	Pro	Phe	Pro	Leu	Leu	Thr
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Ser	Asn	Val	Trp	His	Asp	Ile	Ser	Asp	Phe	Leu	Val	Tyr	Asn	Lys	Ser
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<210> 5893

<211> 1389

<212> DNA

<213> Homo sapiens

<400> 5893

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<210> 5894

<211> 260

<212> PRT

<213> Homo sapiens

<400> 5894

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Tyr Cys Ser Thr Arg Ile Tyr Ala Ser Met Lys Cys Pro Asp Gln Lys
65           70           75           80
Cys Leu Tyr Thr Cys Gln Ile Lys Asp Gly Gly Val Gln Pro Gln Phe
85           90           95
Glu Ile Val Pro Glu Asp Asp Pro Gln Asn Ala Ile Val Ser Ser Ser
100          105          110
Ala Asp Ala Cys His Ala Glu Leu Leu Arg Thr Ile Ser Thr Thr Met
115          120          125
Gly Lys Leu Met Pro Asn Leu Leu Pro Ala Gly Ala Asp Phe Phe Gly
130          135          140
Phe Ser His Pro Ala Ile His Asn Leu Ile Gln Ser Cys Pro Gly Ala
145          150          155          160
Arg Lys Cys Ile Asn Tyr Gln Trp Val Lys Phe Asp Val Cys Lys Pro
165          170          175
Gly Asp Gly Gln Leu Pro Glu Gly Leu Pro Glu Asn Asp Ala Ala Met
180          185          190
Ser Phe Glu Ala Phe Gln Arg Gln Ile Phe Asp Glu Asp Gln Asn Asp
195          200          205
Pro Leu Leu Pro Gly Ser Leu Asp Leu Pro Glu Leu Gln Pro Ala Ala
210          215          220
Phe Val Ser Ser Tyr Gln Pro Met Tyr Leu Thr His Glu Pro Leu Val
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<210> 5895

<211> 2748

<212> DNA

<213> Homo sapiens

<400> 5895

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420

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<210> 5896

<211> 261

<212> PRT

<213> Homo sapiens

<400> 5896

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			20					25					30		
Arg	Asp	Leu	Gly	Gly	Ser	Ser	Ala	Ala	Thr	Glu	Ala	Val	Ala	Ile	Leu
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	50					55					60				
Ile	Arg	Ala	Val	Tyr	Pro	Ala	Phe	Asp	Lys	Asn	Asn	Pro	Ser	Asn	Lys
65					70				75					80	
Leu	Val	Ser	Thr	Ser	Asn	Thr	Val	Thr	Ala	Ala	His	Ile	Lys	Lys	Phe
				85					90					95	
Thr	Phe	Val	Cys	Met	Ala	Leu	Ser	Leu	Thr	Leu	Cys	Phe	Val	Met	Phe
			100					105					110		
Trp	Thr	Pro	Asn	Val	Ser	Glu	Lys	Ile	Leu	Ile	Asp	Ile	Ile	Gly	Val
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	130					135					140				
Phe	Phe	Pro	Val	Pro	Val	Thr	Val	Arg	Ala	His	Leu	Thr	Gly	Trp	Leu
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Met	Thr	Leu	Lys	Lys	Thr	Phe	Val	Leu	Ala	Pro	Ser	Ser	Val	Leu	Arg
			165					170						175	
Ile	Ile	Val	Leu	Ile	Ala	Ser	Leu	Val	Val	Leu	Pro	Tyr	Leu	Gly	Val

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His Gly Ala Thr Leu Gly Val Gly Ser Leu Leu Ala Gly Phe Val Gly					
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Glu Ser Thr Met Val Ala Ile Ala Ala Cys Tyr Val Tyr Arg Lys Gln					
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Lys Lys Lys Met Glu Asn Glu Ser Ala Thr Glu Gly Glu Asp Ser Ala					
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<210> 5897

<211> 1930

<212> DNA

<213> Homo sapiens

<400> 5897

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<210> 5898

<211> 242

<212> PRT

<213> Homo sapiens

<400> 5898

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			20					25					30		
Glu	Ile	Cys	Ala	Asp	Glu	Phe	Pro	Gly	Ser	Ser	Ala	Thr	Tyr	Arg	Ile
		35					40					45			
Leu	Glu	Val	Gly	Cys	Gly	Val	Gly	Asn	Thr	Val	Phe	Pro	Ile	Leu	Gln
	50					55					60				
Thr	Asn	Asn	Asp	Pro	Gly	Leu	Phe	Val	Tyr	Cys	Cys	Asp	Phe	Ser	Ser
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Thr	Ala	Ile	Glu	Leu	Val	Gln	Thr	Asn	Ser	Glu	Tyr	Asp	Pro	Ser	Arg
				85					90					95	
Cys	Phe	Ala	Phe	Val	His	Asp	Leu	Cys	Asp	Glu	Glu	Lys	Ser	Tyr	Pro
		100						105					110		
Val	Pro	Lys	Gly	Ser	Leu	Asp	Ile	Ile	Ile	Leu	Ile	Phe	Val	Leu	Ser
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Asp Met Ala Gln Leu Arg Phe Lys Lys Gly Gln Cys Leu Ser Gly Asn		160
	165	170
Phe Tyr Val Arg Gly Asp Gly Thr Arg Val Tyr Phe Phe Thr Gln Glu		175
	180	185
Glu Leu Asp Thr Leu Phe Thr Thr Ala Gly Leu Glu Lys Val Gln Asn		190
	195	200
Leu Val Asp Arg Arg Leu Gln Val Asn Arg Gly Lys Gln Leu Thr Met		205
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<210> 5899

<211> 1589

<212> DNA

<213> Homo sapiens

<400> 5899

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<210> 5900

<211> 345

<212> PRT

<213> Homo sapiens

<400> 5900

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Ile	Pro	Thr	Ile	Ile	Arg	Asp	Glu	Glu	Leu	Lys	Thr	Arg	Gly	Phe	Gly
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Gly	Ile	Tyr	Gly	Val	Gly	Lys	Ala	Ala	Leu	His	Pro	Pro	Ala	Leu	Ala
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Val	Leu	Ser	His	Thr	Pro	Asp	Gly	Ala	Thr	Gln	Thr	Ile	Ala	Trp	Val
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Gly	Lys	Gly	Ile	Val	Tyr	Asp	Thr	Gly	Gly	Leu	Ser	Ile	Lys	Gly	Lys
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Thr	Thr	Met	Pro	Gly	Met	Lys	Arg	Asp	Cys	Gly	Gly	Ala	Ala	Ala	Val
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Leu	Gly	Ala	Phe	Arg	Ala	Ala	Ile	Lys	Gln	Gly	Phe	Lys	Asp	Asn	Leu
		115					120					125			
His	Ala	Val	Phe	Cys	Leu	Ala	Glu	Asn	Ser	Val	Gly	Pro	Asn	Ala	Thr
	130					135					140				
Arg	Pro	Asp	Asp	Ile	His	Leu	Leu	Tyr	Ser	Gly	Lys	Thr	Val	Glu	Ile
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Asn	Asn	Thr	Asp	Ala	Glu	Gly	Arg	Leu	Val	Leu	Ala	Asp	Gly	Val	Ser
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Tyr	Ala	Cys	Lys	Asp	Leu	Gly	Ala	Asp	Ile	Ile	Leu	Asp	Met	Ala	Thr
			180					185					190		
Leu	Thr	Gly	Ala	Gln	Gly	Ile	Ala	Thr	Gly	Lys	Tyr	His	Ala	Ala	Val

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Leu Thr Asn Ser Ala Glu Trp	Glu Ala Ala Cys Val Lys Ala Gly Arg	
210	215	220
Lys Cys Gly Asp Leu Val His Pro	Leu Val Tyr Cys Pro Glu Leu His	
225	230	235
Phe Ser Glu Phe Thr Ser Ala Val	Ala Asp Met Lys Asn Ser Val Ala	
245	250	255
Asp Arg Asp Asn Ser Pro Ser Ser	Cys Ala Gly Leu Phe Ile Ala Ser	
260	265	270
His Ile Gly Phe Asp Trp Pro Gly	Val Trp Val His Leu Asp Ile Ala	
275	280	285
Ala Pro Val His Ala Gly Glu Arg	Ala Thr Gly Phe Gly Val Ala Leu	
290	295	300
Leu Leu Ala Leu Phe Gly Arg Ala	Ser Glu Asp Pro Leu Leu Asn Leu	
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Val Ser Pro Leu Gly Cys Glu Val	Asp Val Glu Glu Gly Asp Leu Gly	
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<210> 5901

<211> 984

<212> DNA

<213> Homo sapiens

<400> 5901

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 120
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<210> 5902

<211> 328

<212> PRT

<213> Homo sapiens

<400> 5902

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			20					25					30		
Glu	Ile	Glu	Ala	Lys	Leu	Asp	Lys	Leu	Val	Lys	Leu	Cys	Ser	Gly	Met
		35				40						45			
Val	Glu	Ala	Gly	Lys	Ala	Tyr	Val	Ser	Thr	Ser	Arg	Leu	Phe	Val	Ser
	50					55					60				
Gly	Val	Arg	Asp	Leu	Ser	Gln	Gln	Cys	Gln	Gly	Asp	Thr	Val	Ile	Ser
65				70					75					80	
Glu	Cys	Leu	Gln	Arg	Phe	Ala	Asp	Ser	Leu	Gln	Glu	Val	Val	Asn	Tyr
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His	Met	Ile	Leu	Phe	Asp	Gln	Ala	Gln	Arg	Ser	Val	Arg	Gln	Gln	Leu
			100					105					110		
Gln	Ser	Phe	Val	Lys	Glu	Asp	Val	Arg	Lys	Phe	Lys	Glu	Thr	Lys	Lys
		115				120						125			
Gln	Phe	Asp	Lys	Val	Arg	Glu	Asp	Leu	Glu	Leu	Ser	Leu	Val	Arg	Asn
	130					135					140				
Ala	Gln	Ala	Pro	Arg	His	Arg	Pro	His	Glu	Val	Glu	Glu	Ala	Thr	Gly
145					150					155				160	
Ala	Leu	Thr	Leu	Thr	Arg	Lys	Cys	Phe	Arg	His	Leu	Ala	Leu	Asp	Tyr
			165					170						175	
Val	Leu	Gln	Ile	Asn	Val	Leu	Gln	Ala	Lys	Lys	Lys	Phe	Glu	Ile	Leu
		180						185					190		
Asp	Ser	Met	Leu	Ser	Phe	Met	His	Ala	Gln	Ser	Ser	Phe	Phe	Gln	Gln
	195						200						205		
Gly	Tyr	Ser	Leu	Leu	His	Gln	Leu	Asp	Pro	Tyr	Met	Lys	Lys	Leu	Ala
	210					215					220				
Ala	Glu	Leu	Asp	Gln	Leu	Val	Ile	Asp	Ser	Ala	Val	Glu	Lys	Arg	Glu
225				230						235				240	
Met	Glu	Arg	Lys	His	Ala	Ala	Ile	Gln	Gln	Arg	Thr	Leu	Arg	Asp	Phe
			245					250						255	
Ser	Tyr	Asp	Glu	Ser	Lys	Val	Glu	Phe	Asp	Val	Asp	Ala	Pro	Ser	Gly
		260						265					270		
Val	Val	Met	Glu	Gly	Tyr	Leu	Phe	Lys	Arg	Ala	Ser	Asn	Xaa	Phe	Lys
	275						280						285		
Thr	Trp	Asn	Arg	Arg	Trp	Phe	Ser	Ile	Gln	Asn	Ser	Gln	Leu	Val	Tyr
	290					295						300			
Gln	Lys	Lys	Leu	Lys	Asp	Ala	Leu	Thr	Val	Val	Val	Asp	Asp	Leu	Arg
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<210> 5903

<211> 3734

<212> DNA

<213> Homo sapiens

<400> 5903

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<210> 5904

<211> 308

<212> PRT

<213> Homo sapiens

<400> 5904

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			20					25					30		
Pro	Asp	Asp	Tyr	Phe	Leu	Leu	Arg	Trp	Leu	Arg	Ala	Arg	Ser	Phe	Asp
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Leu	Gln	Lys	Ser	Glu	Ala	Met	Leu	Arg	Lys	His	Val	Glu	Phe	Arg	Lys
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Gln	Lys	Asp	Ile	Asp	Asn	Ile	Ile	Ser	Trp	Gln	Pro	Pro	Glu	Val	Ile
65					70					75				80	
Gln	Gln	Tyr	Leu	Ser	Gly	Gly	Met	Cys	Gly	Tyr	Asp	Leu	Asp	Gly	Cys
				85					90					95	
Pro	Val	Trp	Tyr	Asp	Ile	Ile	Gly	Pro	Leu	Asp	Ala	Lys	Gly	Leu	Leu
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Glu	Leu	Leu	Leu	His	Glu	Cys	Glu	Leu	Gln	Thr	Gln	Lys	Leu	Gly	Arg
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Lys	Ile	Glu	Met	Ala	Leu	Met	Val	Phe	Asp	Met	Glu	Gly	Leu	Ser	Leu
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Lys	His	Leu	Trp	Lys	Pro	Ala	Val	Glu	Val	Tyr	Gln	Gln	Phe	Phe	Ser

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 Arg Ala Pro Lys Leu Phe Pro Met Ala Phe Asn Leu Val Lys Ser Phe
 195 200 205
 Met Ser Glu Asp Thr Arg Lys Lys Ile Met Val Leu Gly Ala Asn Trp
 210 215 220
 Lys Glu Val Leu Leu Lys His Ile Ser Pro Asp Gln Val Pro Val Glu
 225 230 235 240
 Tyr Gly Gly Thr Met Thr Asp Pro Asp Gly Asn Pro Lys Cys Lys Ser
 245 250 255
 Lys Ile Asn Tyr Gly Gly Asp Ile Pro Arg Lys Tyr Tyr Val Arg Asp
 260 265 270
 Gln Val Lys Gln Gln Tyr Glu His Ser Val Gln Ile Ser Arg Gly Ser
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<210> 5905

<211> 2280

<212> DNA

<213> Homo sapiens

<400> 5905

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Pro Asp Ser Arg Ala Leu His Tyr Met Lys Lys Leu Tyr Lys Thr Tyr
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Ala Thr Lys Glu Gly Ile Pro Lys Ser Asn Arg Ser His Leu Tyr Asn
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Asp Arg Ile Thr Thr Val Glu His Leu Leu Lys Ser Val Leu Leu Tyr
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Asn Ile Asn Asn Ser Val Ser Phe Ser Ser Ala Val Lys Cys Val Cys
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Asn Leu Met Ile Lys Glu Pro Lys Ser Ser Ser Arg Thr Leu Gly Arg
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Ala Pro Tyr Ser Phe Thr Phe Asn Ser Gln Phe Glu Phe Gly Lys Lys
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His Lys Trp Ile Gln Ile Asp Val Thr Ser Leu Leu Gln Pro Leu Val
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Ala Ser Asn Lys Arg Ser Ile His Met Ser Ile Asn Phe Thr Cys Met
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Lys Asp Gln Leu Glu His Pro Ser Ala Gln Asn Gly Leu Phe Asn Met
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<211> 4343

<212> DNA

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Lys Trp Gln Asp Ile Leu Lys Glu Val Lys Phe Leu Arg Gln Leu Lys
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His Pro Asn Thr Ile Glu Tyr Lys Gly Cys Tyr Leu Lys Glu His Thr
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His Arg Asp Ile Lys Ala Gly Asn Ile Leu Leu Thr Glu Pro Gly Gln
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Val Lys Leu Ala Asp Phe Gly Ser Ala Ser Met Ala Ser Pro Ala Asn
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Ile Thr Cys Ile Glu Leu Ala Glu Arg Lys Pro Pro Leu Phe Asn Met
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Cys Leu Gln Lys Ile Pro Gln Glu Arg Pro Thr Ser Ala Glu Leu Leu
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Glu Val Met Asp Glu Ser Ser Ser Glu Leu Val Met Met His Asp Asp
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<212> DNA

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<211> 981

<212> PRT

<213> Homo sapiens

<400> 5918

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 Arg Thr Met Leu Phe Thr Ile Gly Gln Ser Glu Val Tyr Leu Ile Ser
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 Pro Asp Thr Lys Lys Ile Ala Leu Glu Lys Asn Phe Lys Glu Ile Ser
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<212> DNA

<213> Homo sapiens

<400> 5919

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<212> DNA

<213> Homo sapiens

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<210> 5922

<211> 1252

<212> PRT

<213> Homo sapiens

<400> 5922

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Thr	His	Asn	Asp	Ala	Ile	Gln	Cys	Val	Ser	Tyr	Asn	Pro	Ile	Thr	His
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Gln	Leu	Ala	Ser	Cys	Ser	Ser	Ser	Asp	Phe	Gly	Leu	Trp	Ser	Pro	Glu
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Gln	Lys	Ser	Val	Ser	Lys	His	Lys	Ser	Ser	Ser	Lys	Ile	Ile	Cys	Cys
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Lys	Ser	Ala	Val	Tyr	Ser	Ser	Gln	Gly	Ser	Glu	Ala	Glu	Glu	Glu	Glu
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Pro	Glu	Glu	Glu	Asp	Asp	Ser	Pro	Arg	Asp	Asp	Asn	Leu	Glu	Glu	Arg
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Pro Cys Cys Ile Ser Tyr Phe Thr Lys Gly Glu Tyr Ile Leu Leu Gly				
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Gly Ser Asp Lys Gln Val Ser Leu Phe Thr Lys Asp Gly Val Arg Leu				
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Gly Thr Val Gly Glu Gln Asn Ser Trp Val Trp Thr Cys Gln Ala Lys				
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Pro Asp Ser Asn Tyr Val Val Val Gly Cys Gln Asp Gly Thr Ile Ser				
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Phe Tyr Gln Leu Ile Phe Ser Thr Val His Gly Leu Tyr Lys Asp Arg				
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Tyr Ala Tyr Arg Asp Ser Met Thr Asp Val Ile Val Gln His Leu Ile				
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Thr Glu Gln Lys Val Arg Ile Lys Cys Lys Glu Leu Val Lys Lys Ile				
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5103

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<210> 5923

<211> 1989

<212> DNA

<213> Homo sapiens

<400> 5923

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<211> 146

<212> PRT

<213> Homo sapiens

<400> 5924

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Met Leu Phe His Gly Lys Ala Leu Glu Val Tyr Thr Ala Ala Tyr Gln					
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65		70		75	
Ser Leu Tyr Ala Pro Asp Tyr Ser Ser Arg Leu Asp Ile Val Arg Ala					
85		90		95	
Asn Ser Lys Ser Pro Leu Gln Arg Ser Leu Ser Ala Lys Cys Val Ser					
100		105		110	
Gly Thr Gly Gln Val Ser Thr Cys Arg Leu Arg Lys Asp Gln Gln Ala					
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<210> 5925

<211> 4538

<212> DNA

<213> Homo sapiens

<400> 5925

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<210> 5926

<211> 526

<212> PRT

<213> Homo sapiens

<400> 5926

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Phe	Val	His	Pro	Lys	Pro	Val	Ser	Leu	Thr	Gly	Gly	Arg	Pro	Lys	Gln
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<212> DNA
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<210> 5928

<211> 202

<212> PRT

<213> Homo sapiens

<400> 5928

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	35	40	45
Phe Leu Met	Glu Asn Arg Val Gln Ser Phe Tyr Gln Gln Glu Leu Glu		
	50	55	60
Met Val Glu	Ser Leu Leu Ser Leu Ala Asn Gln Pro Val Ile His Ser		
	65	70	75
Ala Cys Ser	Asp Gln Val Asn Phe Lys Lys Asp Thr Thr Ser Lys Ala		
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Ile His Ser	Ile Phe Lys Asn Ala Ile Gln Leu Leu Gln Glu Lys Gly		
	100	105	110
Leu Val Phe	Gln Lys Asp Asp Gly Phe Asp Asn Leu Tyr Tyr Val Thr		
	115	120	125
Arg Glu Asp	Lys Asp Leu His Arg Lys Ile His Arg Ile Ile Gln Gln		
	130	135	140
Asp Cys Gln	Lys Pro Asn His Met Glu Lys Gly Cys His Phe Leu His		
	145	150	155
Ile Leu Ala	Cys Ala Arg Leu Ser Ile Arg Pro Gly Leu Ser Glu Ala		
	165	170	175
Val Leu Gln	Gln Val Leu Glu Leu Leu Glu Asp Gln Ser Asp Ile Val		
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<210> 5929

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<212> DNA

<213> Homo sapiens

<400> 5929

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 35 40 45
 Leu Gln Pro Ala Gly Ser Val Ser Ser Thr Pro Leu Ser Thr Pro Cys
 50 55 60
 Ser Ser Val Pro Ser Ser Pro Ser Phe Ser Pro Thr Glu Gln Lys Thr
 65 70 75 80
 His Leu Glu Asp Leu Tyr Trp Met Ala Ser Asn Tyr Gln Gln Met Asn
 85 90 95
 Pro Glu Ala Leu Asn Leu Thr Pro Glu Asp Ala Val Glu Ala Leu Ile
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 Gly Ser His Pro Val Pro Gln Pro Leu Gln Ser Phe Asp Ser Phe Arg
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<210> 5931
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 <212> DNA
 <213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

<400> 5932

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 Ala Gly Ser Ser Gly Pro Gly Asn Ser Gln Asn Ser Phe Leu Val Gln
 50 55 60
 Glu Val Met Glu Glu Glu Trp Asn Ala Leu Gln Ser Val Glu Asn Cys
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<210> 5933

<211> 1953

<212> DNA

<213> Homo sapiens

<400> 5933

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<210> 5934

<211> 314

<212> PRT

<213> Homo sapiens

<400> 5934

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Ser	Leu	Phe	Glu	Glu	Ala	His	Lys	Met	Val	Arg	Glu	Ala	Asn	Met	Lys
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Met	Leu	Gln	Ala	Glu	Val	Thr	Ala	Leu	Lys	Thr	Leu	Val	Ile	Thr	Ser
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Thr	Pro	Ala	Ser	Pro	Asn	Arg	Glu	Leu	His	Pro	Gln	Leu	Leu	Ser	Pro

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Thr Ile Glu Pro Val Ala Ser Gln Thr Leu Pro Thr Val Lys Val Ala		
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Glu Val Asp Cys Ser Ser Thr Asn Thr Cys Ala Leu Ser Gly Leu Thr		
225	230	235
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Tyr Ile Ser Pro Ser Ser Arg Ala Arg Ile Thr Ala Val Cys Asn Phe		
260	265	270
Phe Thr Tyr Ile Arg Tyr Ile Gln Gln Gly Leu Val Arg Gln Asp Ala		
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<210> 5935

<211> 2727

<212> DNA

<213> Homo sapiens

<400> 5935

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<210> 5936

<211> 154

<212> PRT

<213> Homo sapiens

<400> 5936

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		20					25					30			
Asp	Gln	Glu	Pro	Pro	Pro	Pro	Tyr	Gln	Glu	Gln	Val	Pro	Val	Pro	Val
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Tyr	His	Pro	Thr	Pro	Ser	Gln	Thr	Arg	Leu	Ala	Thr	Gln	Leu	Thr	Glu
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Glu	Glu	Gln	Ile	Arg	Ile	Ala	Gln	Arg	Ile	Gly	Leu	Ile	Gln	His	Leu
65				70					75				80		
Pro	Lys	Gly	Val	Tyr	Asp	Pro	Gly	Arg	Asp	Gly	Ser	Glu	Lys	Lys	Ile
		85					90					95			
Arg	Glu	Cys	Val	Ile	Cys	Met	Met	Asp	Phe	Val	Tyr	Gly	Asp	Pro	Ile
	100						105					110			
Arg	Phe	Leu	Pro	Cys	Met	His	Ile	Tyr	His	Leu	Asp	Cys	Ile	Asp	Asp
	115					120					125				
Trp	Leu	Met	Arg	Ser	Phe	Thr	Cys	Pro	Ser	Cys	Met	Glu	Pro	Val	Asp
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<210> 5937

<211> 1536

<212> DNA

<213> Homo sapiens

<400> 5937

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<210> 5938

<211> 406

<212> PRT

<213> Homo sapiens

<400> 5938

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 20           25           30
Gly Lys Ser Leu Ile Val Pro Phe Lys Gly Ser Arg Val Ile Asp Ser
 35           40           45
Thr Val Leu Pro Gly Ile Leu Ile Glu Met Ser Glu Val Gln Leu Met
 50           55           60
Arg Leu Leu Pro Ile Lys Lys Ser Thr Ala Leu Lys Val Ala Leu Phe
 65           70           75           80
Cys Thr Thr Leu Ser Gly Asp Thr Ser Asp Thr Gly Glu Gly Thr Val
 85           90           95
Val Val Ser Tyr Gly Val Ser Leu Glu Asn Ala Val Leu Asp Gln Leu
100           105           110
Leu Asn Leu Gly Arg Gln Leu Ile Ser Asp His Val Asp Leu Val Leu
115           120           125
Cys Gln Lys Val Ile His Pro Ser Leu Lys Gln Phe Leu Asn Met His
130           135           140
Arg Ile Ile Ala Ile Asp Arg Ile Gly Val Thr Leu Met Glu Pro Leu
145           150           155           160
Thr Lys Met Thr Gly Thr Gln Pro Ile Gly Ser Leu Gly Ser Ile Cys
165           170           175
Pro Asn Ser Tyr Gly Ser Val Lys Asp Val Cys Thr Ala Lys Phe Gly
180           185           190
Ser Lys His Phe Phe His Leu Ile Pro Asn Glu Ala Thr Ile Cys Ser
195           200           205
Leu Leu Leu Cys Asn Arg Asn Asp Thr Ala Trp Asp Glu Leu Lys Leu
210           215           220
Thr Cys Gln Thr Ala Leu His Val Leu Gln Leu Thr Leu Lys Glu Pro
225           230           235           240
Trp Ala Leu Leu Gly Gly Gly Cys Thr Glu Thr His Leu Ala Ala Tyr
245           250           255
Ile Arg His Lys Thr His Asn Asp Pro Glu Ser Ile Leu Lys Asp Asp
260           265           270
Glu Cys Thr Gln Thr Glu Leu Gln Leu Ile Ala Glu Ala Phe Cys Ser
275           280           285
Ala Leu Glu Ser Val Val Gly Ser Leu Glu His Asp Gly Gly Glu Ile
290           295           300
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305           310           315           320
Pro Cys Val Ala Asn Trp Pro Asp Leu Leu Ser Gln Cys Gly Cys Gly
325           330           335
Leu Tyr Asn Ser Gln Glu Glu Leu Asn Trp Ser Phe Leu Arg Ser Thr
340           345           350
Arg Arg Pro Phe Val Pro Gln Ser Cys Leu Pro His Glu Ala Val Gly
355           360           365
Ser Ala Ser Asn Leu Thr Leu Asp Cys Leu Thr Ala Lys Leu Ser Gly
370           375           380
Leu Gln Val Ala Val Glu Thr Ala Asn Leu Ile Leu Asp Leu Ser Tyr
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Val Ile Glu Asp Lys Asn

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405

<210> 5939

<211> 795

<212> DNA

<213> Homo sapiens

<400> 5939

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300
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<210> 5940

<211> 96

<212> PRT

<213> Homo sapiens

<400> 5940

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20        25        30
Ala Ile Phe Lys Glu Asn Lys Arg Pro Ser Lys Glu Met Gln Val Thr
35        40        45
Ile Ser Gln Gln Leu Gly Leu Glu Leu Asn Thr Val Ser Asn Phe Phe
50        55        60
Met Asn Ala Arg Arg Arg Cys Met Asn Arg Trp Ala Glu Glu Pro Ser
65        70        75        80
Thr Ala Pro Gly Gly Pro Ala Gly Ala Thr Ala Thr Phe Ser Lys Ala

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85

90

95

<210> 5941

<211> 2590

<212> DNA

<213> Homo sapiens

<400> 5941

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120
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<210> 5942

<211> 89

<212> PRT

<213> Homo sapiens

<400> 5942

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 Pro Gly Ser Leu Gln Pro Pro Pro Gly Phe Lys Gln Phe Ser Cys

35 40 45
 Leu Ser Leu Pro Ser Ser Trp Asp Tyr Arg Cys Leu Ser Ser Arg Leu
 50 55 60
 Ala Thr Phe Cys Ile Phe Ser Arg Asp Arg Val Ser Pro Cys Trp Pro
 65 70 75 80
 Gly Trp Ser Gln Thr Pro Asp Leu Lys
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<210> 5943

<211> 781

<212> DNA

<213> Homo sapiens

<400> 5943

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 781

<210> 5944

<211> 174

<212> PRT

<213> Homo sapiens

<400> 5944

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 20 25 30
 Gly Val Ser Ser Ile Thr Lys Leu Gln Arg Gln Pro Phe Gly Val Glu

	35		40		45									
Thr	Lys	Pro	Gly	Ile	Leu	Cys	Cys	Phe	Gln	Asn	Glu	Phe	Glu	Asn
	50					55					60			
Cys	Phe	Pro	Lys	Ser	His	Phe	Ser	Val	Thr	Gln	Ala	Gly	Glu	Gln
65					70					75				80
Arg	Asp	Leu	Ser	Ser	Pro	Gln	Pro	Pro	Pro	Pro	Arg	Phe	Lys	Gln
			85						90					95
Ser	Cys	Leu	Ser	Leu	Pro	Ser	Ser	Trp	Asp	His	Arg	His	Pro	Pro
		100						105					110	
Arg	Pro	Ala	Asn	Phe	Cys	Ile	Phe	Ser	Arg	Asp	Glu	Val	Ser	Pro
	115						120					125		
Ser	Arg	Ser	Pro	Asp	Leu	Met	Xaa	Ser	Ala	His	Leu	Gly	Leu	Pro
	130					135					140			
Cys	Trp	Asp	Tyr	Arg	Arg	Glu	Pro	Leu	Arg	Pro	Ala	Gln	Ile	Ser
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Leu	Phe	Ser	Lys	Ser	Pro	Ser	Gln	Asp	Ile	Gln	Ala	Lys	Ala	
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<210> 5945

<211> 869

<212> DNA

<213> Homo sapiens

<400> 5945

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 420
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<210> 5946

<211> 121

<212> PRT

<213> Homo sapiens

<400> 5946

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 35 40 45
 Arg Ile Arg Arg Gly His Ala Arg Leu Ala Leu Ser Gln Asn Gln Gln
 50 55 60
 Ser Ser Gly Ala Ala Gly Pro Thr Gly Lys Asn Gly Glu Lys Ile Gln
 65 70 75 80
 Val Leu Thr Asp Lys Ile Asp Val Leu Leu Gln Gln Ile Glu Glu Leu
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 Glu Gln Leu Lys Glu Glu Arg Glu Leu
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<210> 5947

<211> 2283

<212> DNA

<213> Homo sapiens

<400> 5947

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 240
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 300
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<210> 5948
 <211> 76
 <212> PRT
 <213> Homo sapiens

<400> 5948
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<210> 5950

<211> 397

<212> PRT

<213> Homo sapiens

<400> 5950

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Lys	Ala	Val	Tyr	Glu	Gly	Ile	Val	Val	Asp	Val	Pro	Phe	Ala	Ser	Phe
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Ser	Tyr	Asp	Glu	Asp	Val	Met	Gly	Gln	Leu	Val	Cys	His	Glu	Leu	Ile
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	245	250
Asn Ala Glu Ile Asp Leu Glu Asp Leu Lys Lys His Thr Val Tyr Tyr		255
	260	265
Gly Gly Phe His Gly Ser His Arg Val Ile Ile Trp Leu Trp Asp Ile		270
	275	280
Leu Ala Ser Asp Phe Thr Pro Asp Glu Arg Ala Met Phe Leu Lys Phe		285
	290	295
Val Thr Ser Cys Ser Arg Pro Pro Leu Leu Gly Phe Ala Tyr Leu Lys		300
305	310	315
Pro Pro Phe Ser Ile Arg Cys Val Glu Val Ser Asp Asp Gln Asp Thr		320
	325	330
Gly Asp Thr Leu Gly Ser Val Leu Arg Gly Phe Phe Thr Ile Arg Lys		335
	340	345
Arg Glu Pro Gly Gly Arg Leu Pro Thr Ser Ser Thr Cys Phe Asn Leu		350
	355	360
Leu Lys Leu Pro Asn Tyr Ser Lys Lys Ser Val Leu Arg Glu Lys Leu		365
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Arg Tyr Ala Ile Ser Met Asn Thr Gly Phe Glu Leu Ser		380
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<210> 5951

<211> 1724

<212> DNA

<213> Homo sapiens

<400> 5951

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<211> 378

<212> PRT

<213> Homo sapiens

<400> 5952

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Ala	Pro	Arg	Phe	Pro	Pro	Gly	Gly	Phe	Ala	Ala	Gly	Arg	Thr	Met	Leu
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<211> 777

<212> DNA

<213> Homo sapiens

<400> 5953

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<210> 5954

<211> 152

<212> PRT

<213> Homo sapiens

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<211> 1459

<212> DNA

<213> Homo sapiens

<400> 5955

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<210> 5956

<211> 431

<212> PRT

<213> Homo sapiens

<400> 5956

Xaa	Asn	Trp	Thr	Ala	Leu	Ser	Asn	Thr	Cys	Ala	Met	Tyr	Ile	Leu	Ser
1					5				10				15		
Ala	Pro	Ala	Ser	Arg	Tyr	Pro	Gly	Gly	Leu	Met	Ser	Glu	Phe	Ser	Pro

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      20      25      30
Arg Phe Lys Ala Leu Pro Pro Gly Ala Gln Pro Val Ile Cys Ile His
      35      40      45
Ser Ala Cys Thr Trp Ala Asp Asp Leu Ser Val Cys Tyr Pro Ser Pro
      50      55      60
His Ile Thr Ile His Met His Gly Gly Thr Ser Ser Asp Gly Ser Ser
      65      70      75      80
Ser Met Ala Ala Ile Tyr Gly Gly Val Glu Gly Gly Gly Thr Arg Ser
      85      90      95
Glu Val Leu Leu Val Ser Glu Asp Gly Lys Ile Leu Ala Glu Ala Asp
      100      105      110
Gly Leu Ser Thr Asn His Trp Leu Ile Gly Thr Asp Lys Cys Val Glu
      115      120      125
Arg Ile Asn Glu Met Val Asn Arg Ala Lys Arg Lys Ala Gly Val Asp
      130      135      140
Pro Leu Val Pro Leu Arg Ser Leu Gly Leu Ser Leu Ser Gly Gly Asp
      145      150      155      160
Gln Glu Asp Ala Gly Arg Ile Leu Ile Glu Glu Leu Arg Asp Arg Phe
      165      170      175
Pro Tyr Leu Ser Glu Ser Tyr Leu Ile Thr Thr Asp Ala Ala Gly Ser
      180      185      190
Ile Ala Thr Ala Thr Pro Asp Gly Gly Val Val Leu Ile Ser Gly Thr
      195      200      205
Gly Ser Asn Cys Arg Leu Ile Asn Pro Asp Gly Ser Glu Ser Gly Cys
      210      215      220
Gly Gly Trp Gly His Met Met Gly Asp Glu Gly Ser Ala Leu Ser Ala
      225      230      235      240
Pro Ser Ala Tyr Trp Ile Ala His Gln Ala Val Lys Ile Val Phe Asp
      245      250      255
Ser Ile Asp Asn Leu Glu Ala Ala Pro His Asp Ile Gly Tyr Val Lys
      260      265      270
Gln Ala Met Phe His Tyr Phe Gln Val Pro Asp Arg Leu Gly Ile Leu
      275      280      285
Thr His Leu Tyr Arg Asp Phe Asp Lys Cys Arg Phe Ala Gly Phe Cys
      290      295      300
Arg Lys Ile Ala Glu Gly Ala Gln Gln Gly Asp Pro Leu Ser Arg Tyr
      305      310      315      320
Ile Phe Arg Lys Ala Gly Glu Met Leu Gly Arg His Ile Val Ala Val
      325      330      335
Leu Pro Glu Ile Asp Pro Val Leu Phe Gln Gly Lys Ile Gly Leu Pro
      340      345      350
Ile Leu Cys Val Gly Ser Val Trp Lys Ser Trp Glu Leu Leu Lys Glu
      355      360      365
Gly Phe Leu Leu Ala Leu Thr Gln Gly Arg Glu Ile Gln Ala Gln Asn
      370      375      380
Phe Phe Ser Ser Phe Thr Leu Met Lys Leu Arg His Ser Ser Ala Leu
      385      390      395      400
Gly Gly Ala Ser Leu Gly Ala Arg His Ile Gly His Leu Leu Pro Met
      405      410      415
Asp Tyr Ser Ala Asn Ala Ile Ala Phe Tyr Ser Tyr Thr Phe Ser
      420      425      430

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<210> 5957

<211> 855

<212> DNA

<213> Homo sapiens

<400> 5957

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 120
 ctaaacaggc accgccaggc tggaagcagt gggccaggga attctcagaa cagctttcta
 180
 gttcaagagg tgatggaaga agagtggaat gctttgcagt cagtggagaa ttgtccagaa
 240
 gacttggtc agctggagga gctgatagac atggctgtgc tggaggaaat tcaacaggag
 300
 ctgatcaacc aaggcctgtg atacttgggc tgtgatcctc tagagccagc ttggactcac
 360
 atcattctat ggggttgaag acaactcatt ccctctgagg agccttgtac atacaagcct
 420
 tttattata acctattttg tattgaaact tttaacaat actgaagaaa aaaaaacttt
 480
 tccgacatct gttcttggtc ttttgtgaca caggttgaag ggggaggaat agaaaaagac
 540
 aaactgcctt ggaggagata aaccaatttt atgtctatca tgttatataa aaatctagaa
 600
 ataatagatt tgtacagaaa aaaatgataa taaatgagag cacaaaacat ataatttaaa
 660
 tctggtattt tttcccccatt gatattagga tgataatcat ttcaaagcac atgtctagct
 720
 tcagagtagg atttgttcac tggccaaagc ctgcatgaa actatggctt tcagcatctg
 780
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 840
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 855

<210> 5958

<211> 106

<212> PRT

<213> Homo sapiens

<400> 5958

Met	Ala	Glu	Ser	Leu	Arg	Ser	Pro	Arg	Arg	Ser	Leu	Tyr	Lys	Leu	Val
1				5					10					15	
Gly	Ser	Pro	Pro	Trp	Lys	Glu	Ala	Phe	Arg	Gln	Arg	Cys	Leu	Glu	Arg
			20					25					30		
Met	Arg	Asn	Ser	Arg	Asp	Arg	Leu	Leu	Asn	Arg	Tyr	Arg	Gln	Ala	Gly
		35					40					45			
Ser	Ser	Gly	Pro	Gly	Asn	Ser	Gln	Asn	Ser	Phe	Leu	Val	Gln	Glu	Val
		50				55					60				
Met	Glu	Glu	Glu	Trp	Asn	Ala	Leu	Gln	Ser	Val	Glu	Asn	Cys	Pro	Glu
65					70					75				80	
Asp	Leu	Ala	Gln	Leu	Glu	Glu	Leu	Ile	Asp	Met	Ala	Val	Leu	Glu	Glu
			85						90					95	
Ile	Gln	Gln	Glu	Leu	Ile	Asn	Gln	Gly	Leu						

100

105

<210> 5959

<211> 830

<212> DNA

<213> Homo sapiens

<400> 5959

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 120
 ctatatgatg acaatctctt ctgtcatttg gtggatgaag tactcttgtt tgaaagggag
 180
 ctacacagtg ttcatggcta tcctggcact tttgctaatt gtatgcatat tctatcagag
 240
 gaaacctgtt ttcaaagatg ggtgacgggg gagagaaaat ttgctcttca aaaaatggag
 300
 tcaatgcttt cctcagaagc tgcctgggta tcgcaatata aggatatac tgacgtggat
 360
 gaaatgaaag ttccagattg tgcagaaact tttatgactc tactcttggg tataactgac
 420
 aggtataaaa atcttcccac agcttcccga aagcttcagt tcctggagtt acagaaggac
 480
 ttagtagatg attttaggat acgattaaca caagtgatga aagaagagac tagagcttcc
 540
 cttggctttc gatactgtgc aattcttaat gctgtgaact acatctcaac agtactagca
 600
 gattgggctg acaatgtttt ctttctacaa ctccaacagg ctgcactgga ggtgtttgca
 660
 gagaataata ctctgagtaa attgcagcta ggacagctag cctctatgga gagctctgtc
 720
 tttgatgaca tgattaacct cttagaacgt ttaaagcatg atatgttgac ccgtcaagta
 780
 gaccacgttt ttagagaagt taaagatgct gcaaaattgt ataaaaaaga
 830

<210> 5960

<211> 251

<212> PRT

<213> Homo sapiens

<400> 5960

Met	Met	Leu	Val	Leu	Glu	Lys	Leu	Ala	Thr	Asp	Ile	Pro	Cys	Leu	Leu
1				5					10					15	
Tyr	Asp	Asp	Asn	Leu	Phe	Cys	His	Leu	Val	Asp	Glu	Val	Leu	Leu	Phe
			20					25					30		
Glu	Arg	Glu	Leu	His	Ser	Val	His	Gly	Tyr	Pro	Gly	Thr	Phe	Ala	Asn
		35				40					45				
Cys	Met	His	Ile	Leu	Ser	Glu	Thr	Cys	Phe	Gln	Arg	Trp	Val	Thr	
		50				55				60					
Gly	Glu	Arg	Lys	Phe	Ala	Leu	Gln	Lys	Met	Asp	Ser	Met	Leu	Ser	Ser
65				70					75				80		
Glu	Ala	Ala	Trp	Val	Ser	Gln	Tyr	Lys	Asp	Ile	Thr	Asp	Val	Asp	Glu

	85		90		95
Met	Lys Val Pro Asp Cys Ala Glu Thr	Phe Met Thr Leu Leu Val			
	100	105	110		
Ile	Thr Asp Arg Tyr Lys Asn Leu Pro	Thr Ala Ser Arg Lys Leu Gln			
	115	120	125		
Phe	Leu Glu Leu Gln Lys Asp Leu Val	Asp Asp Phe Arg Ile Arg Leu			
	130	135	140		
Thr	Gln Val Met Lys Glu Glu Thr Arg	Ala Ser Leu Gly Phe Arg Tyr			
	145	150	155	160	
Cys	Ala Ile Leu Asn Ala Val Asn Tyr	Ile Ser Thr Val Leu Ala Asp			
	165	170	175		
Trp	Ala Asp Asn Val Phe Phe Leu Gln	Leu Gln Gln Ala Ala Leu Glu			
	180	185	190		
Val	Phe Ala Glu Asn Asn Thr Leu Ser	Lys Leu Gln Leu Gly Gln Leu			
	195	200	205		
Ala	Ser Met Glu Ser Ser Val Phe Asp	Asp Met Ile Asn Leu Leu Glu			
	210	215	220		
Arg	Leu Lys His Asp Met Leu Thr Arg	Gln Val Asp His Val Phe Arg			
	225	230	235	240	
Glu	Val Lys Asp Ala Ala Lys Leu Tyr	Lys Lys			
	245	250			

<210> 5961

<211> 585

<212> DNA

<213> Homo sapiens

<400> 5961

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 aatgaagcga gaccccgctct ctaaaaaaaaa aattgagggg tcaaagagga tgccaaactt
 120
 aattagagac tgagacaggg cagggtgccg aggtgtctgc atgcgtttca tgtggatgcc
 180
 cgtgtctatt ctggcctgct cctgggcgcc cccccactc agccctggct gatgagaatg
 240
 ggacagggac tcccttctcg tgtccctgtg cagcgtcggc ccaggaggta gcagagcagt
 300
 atatgcacat ctgggtgtgc cctcctgcac gtcccccacac atctgtcatt cctgtctttg
 360
 cacacctatg tgactccgc atgttttgtt cttatgtgt cccatgcatt cccccatct
 420
 gaccttgcgt gttctcgcgt gtctgtgtgc ggccagtcct gccttcactc tctcatgggt
 480
 ggccctggca gcatgtctgg cccccagca ggtgagctca ggagataaga tggaagatgc
 540
 aacagccaat ggtcaagaag actccaaggc cccagatggg tccac
 585

<210> 5962

<211> 114

<212> PRT

<213> Homo sapiens

<400> 5962

Met Cys Gly Asp Met Gln Glu Gly Thr Pro Arg Cys Ala Tyr Thr Ala
 1 5 10 15
 Leu Leu Pro Pro Gly Pro Thr Leu His Arg Asp Thr Arg Arg Glu Ser
 20 25 30
 Leu Ser His Ser His Gln Pro Gly Leu Ser Gly Glu Gly Ala Gln Glu
 35 40 45
 Gln Ala Arg Ile Asp Thr Gly Ile His Met Lys Arg Met Gln Thr Pro
 50 55 60
 Arg His Pro Ala Leu Ser Gln Ser Leu Ile Lys Phe Gly Ile Leu Phe
 65 70 75 80
 Asp Pro Ser Ile Phe Phe Leu Glu Thr Gly Ser Arg Phe Ile Ala Gln
 85 90 95
 Ala Glu Cys Ser Gly Tyr Ser Gln Ala Pro Leu Glu Arg Thr Ala Ala
 100 105 110
 Pro Ser

<210> 5963

<211> 1288

<212> DNA

<213> Homo sapiens

<400> 5963

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 120
 gaagaaaaag tgaaacgatc tgtgaaagat gctgccaaga agggccagaa ggatgtctgc
 180
 atagttcttg ccaaggagat gatcagggtca aggaaggctg tgagcaagct gtatgcatcc
 240
 aaagcacaca tgaactcagt gctcatgggg atgaagaacc agctcgcggt cttgcgagtg
 300
 gctgggtccc tgcagaagag cacagaagtg atgaaggcca tgcaaagtct tgtgaagatt
 360
 ccagagattc agggccaccat gagggagttg tccaaagaaa tgatgaaggc tgggatcata
 420
 gaggagatgt tagaggacac ttttgaaagc atggacgatc aggaagaaat ggaggaagaa
 480
 gcagaaatgg aaattgacag aattctcttt gaaattacag caggggcctt gggcaaagca
 540
 cccagtaaag tgactgatgc cttccagag ccagaacctc caggagcgat ggctgcctca
 600
 gaggatgagg aggaggagga agaggctctg gaggccatgc agtcccggtt ggccacactc
 660
 cgcagctagg ggctgcctac cccgctgggt gtgcacacac tcctctcaag agctgccatt
 720
 ttatgtgtct cttgcactac acctctgttg tgaggactac cattttggag aaggttctgt
 780
 ttgtctcttt tcattctctg ccaggtttt gggatcgcaa agggattgtt cttataaaa
 840
 tggcataaat aaatgcacat ttttaggag tatagacaga tatatcttat tgtggggagg
 900

ggaaagaaat ccattctgctc atgaagcact tctgaaaata taggtgattg cctgaatgct
 960
 gaagactcta cttttgtcta taaaacacta tataaatgaa ttttaataaa tttttgcttc
 1020
 agcatttggc cccattgtag attgccctgt gcagtaaact ttcaagggtg cagctgcccc
 1080
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 1140
 agctcagcag aagtgacttc tgctctgtgg ttgctgctcc ccggctttca cagacatggt
 1200
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 1260
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 1288

<210> 5964

<211> 222

<212> PRT

<213> Homo sapiens

<400> 5964

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Asn	Glu	Trp	Ser	Leu	Lys	Ile	Arg	Lys	Glu	Met	Arg	Val	Val	Asp	Arg
			20					25					30		
Gln	Ile	Arg	Asp	Ile	Gln	Arg	Glu	Glu	Lys	Val	Lys	Arg	Ser	Val	
		35				40					45				
Lys	Asp	Ala	Ala	Lys	Lys	Gly	Gln	Lys	Asp	Val	Cys	Ile	Val	Leu	Ala
	50					55					60				
Lys	Glu	Met	Ile	Arg	Ser	Arg	Lys	Ala	Val	Ser	Lys	Leu	Tyr	Ala	Ser
65				70					75					80	
Lys	Ala	His	Met	Asn	Ser	Val	Leu	Met	Gly	Met	Lys	Asn	Gln	Leu	Ala
			85						90					95	
Val	Leu	Arg	Val	Ala	Gly	Ser	Leu	Gln	Lys	Ser	Thr	Glu	Val	Met	Lys
			100						105				110		
Ala	Met	Gln	Ser	Leu	Val	Lys	Ile	Pro	Glu	Ile	Gln	Ala	Thr	Met	Arg
		115					120					125			
Glu	Leu	Ser	Lys	Glu	Met	Met	Lys	Ala	Gly	Ile	Ile	Glu	Glu	Met	Leu
	130					135					140				
Glu	Asp	Thr	Phe	Glu	Ser	Met	Asp	Asp	Gln	Glu	Glu	Met	Glu	Glu	Glu
145					150					155				160	
Ala	Glu	Met	Glu	Ile	Asp	Arg	Ile	Leu	Phe	Glu	Ile	Thr	Ala	Gly	Ala
			165						170					175	
Leu	Gly	Lys	Ala	Pro	Ser	Lys	Val	Thr	Asp	Ala	Leu	Pro	Glu	Pro	Glu
		180						185					190		
Pro	Pro	Gly	Ala	Met	Ala	Ala	Ser	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Glu
		195				200						205			
Ala	Leu	Glu	Ala	Met	Gln	Ser	Arg	Leu	Ala	Thr	Leu	Arg	Ser		
	210					215					220				

<210> 5965

<211> 1011

<212> DNA

<213> Homo sapiens

<400> 5965

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 120
 agatgcctgg agagaatgag aaacagccgg gacaggctcc taaacaggta ccgccaggct
 180
 ggaagcagtg ggccagggaa ttctcagaac agctttctag ttcaagaggt gatggaagaa
 240
 gagtggaaatg ctttgcagnn tcagtggag aattgtccag aagacttggc tcagttggag
 300
 gagctgatag acatggctgt gctggaggaa attcaacagg agctgatcaa ccaagagcag
 360
 tccatcatca gcgagtatga gaagagcttg cagtttgatg aaaagtgtct cagcatcatg
 420
 ctggctgagt gggaggcaaa cccactcatc tgcctgtat gtacaaagta caacctgaga
 480
 atcacaagcg gtgtgggtgt gtgtcagtg ggctgtcca tcccatctca ttcttctgag
 540
 ttgacagagc agaagcttcg tgctgttta gagggtagta taaatgagca cagtgcacat
 600
 tgtccccaca cacctgaatt ttcagtcact ggaggaacag aagaaaagtc cagtcttctc
 660
 atgagctgtc tggcctgtga tacttgggct gtgatcctct agagccagct tggactcaca
 720
 tcattctatg gggttgaaga caactcatc cctctgagga gccttgata tacaagcctt
 780
 ttatttataa cttattttgt attgaaactt ttaacaata ctgaagaaaa aaaaactttt
 840
 ccgacatctg ttcttggctt tttgtgacgc aggttgaagg gggaggaata gaaaaagaca
 900
 aactgccttg gaggagataa accaatttta tgtctatcat gttatacaaa aatctagaaa
 960
 taatagattt gtacagaaaa aaatgataat aaatgagaac acaaacata t
 1011

<210> 5966

<211> 233

<212> PRT

<213> Homo sapiens

<400> 5966

Gly Asn Gly Ser Cys Gly Phe Val Ser Arg Glu Glu Glu Met Ala Glu
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 Ser Leu Arg Ser Pro Arg Arg Ser Leu Tyr Lys Leu Val Gly Ser Pro
 20 25 30
 Pro Trp Lys Glu Ala Phe Arg Gln Arg Cys Leu Glu Arg Met Arg Asn
 35 40 45
 Ser Arg Asp Arg Leu Leu Asn Arg Tyr Arg Gln Ala Gly Ser Ser Gly
 50 55 60
 Pro Gly Asn Ser Gln Asn Ser Phe Leu Val Gln Glu Val Met Glu Glu
 65 70 75 80
 Glu Trp Asn Ala Leu Gln Xaa Gln Trp Xaa Asn Cys Pro Glu Asp Leu

	85		90		95										
Ala	Gln	Leu	Glu	Glu	Leu	Ile	Asp	Met	Ala	Val	Leu	Glu	Glu	Ile	Gln
	100						105					110			
Gln	Glu	Leu	Ile	Asn	Gln	Glu	Gln	Ser	Ile	Ile	Ser	Glu	Tyr	Glu	Lys
	115						120					125			
Ser	Leu	Gln	Phe	Asp	Glu	Lys	Cys	Leu	Ser	Ile	Met	Leu	Ala	Glu	Trp
	130						135				140				
Glu	Ala	Asn	Pro	Leu	Ile	Cys	Pro	Val	Cys	Thr	Lys	Tyr	Asn	Leu	Arg
	145					150					155				160
Ile	Thr	Ser	Gly	Val	Val	Val	Cys	Gln	Cys	Gly	Leu	Ser	Ile	Pro	Ser
			165						170				175		
His	Ser	Ser	Glu	Leu	Thr	Glu	Gln	Lys	Leu	Arg	Ala	Cys	Leu	Glu	Gly
			180					185					190		
Ser	Ile	Asn	Glu	His	Ser	Ala	His	Cys	Pro	His	Thr	Pro	Glu	Phe	Ser
		195					200					205			
Val	Thr	Gly	Gly	Thr	Glu	Glu	Lys	Ser	Ser	Leu	Leu	Met	Ser	Cys	Leu
	210					215					220				
Ala	Cys	Asp	Thr	Trp	Ala	Val	Ile	Leu							
225					230										

<210> 5967

<211> 1806

<212> DNA

<213> Homo sapiens

<400> 5967

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 120
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 180
 atcttttct ctattttaga aatggatttc aatgggtgtc agtttgtttg cagaaacct
 240
 ctgaaagtga gcatgtttt gaacacatta acaccgaagt tctacgtggc cctaacaggc
 300
 acttcctcac taatcagcagg gcttattttg atatttgaat ggtgggtattt tcgcaaatac
 360
 ggaacttcat tcattgaaca agtctcagta agccacttgc gccccttct gggaggggtt
 420
 gacaacaact ctccaacaa ttctaattcc agtaacgggg actcagattc caataggcaa
 480
 agtgtctcag aatgcaaagt atggcgaaat ccactaaatt tatttagggg tgctgaatac
 540
 aatcggtata ctgggtgac aggacgagag cctcttactt actatgacat gaatctctct
 600
 gcccaagacc accagacatt ctttacttgt gactcggacc atctgcgtcc cgcagatgca
 660
 ataatgcaga aagcctggag agagagaaac cccaagcta ggatttctgc agtcatgaa
 720
 gccttgagaa taaatgagac gagacaccaa tgtcttggtg tacatcaaaa gaaggctagc
 780
 aatgtgtgcc agaagactcg ggaggaccag ggaagcaaag cccttctgga actacaagca
 840

tatgctgatg ttcaggcagt cttagcaaag tatgatgata taagcttacc aaagtcagca
 900
 acaatatgct acacagctgc tttgctcaaa gcaagagctg tctctgacaa attctctcct
 960
 gaggtgcat ctggcgggg gctgagcaca gcagagatga atgcagtaga ggccattcat
 1020
 agagctgtgg aattcaatcc tcatgtgcca aaatacctac tagaaatgaa aagcttaate
 1080
 ctacccccag aacatatcct gaagagagga gacagtgaag caatagcata tgcattcttt
 1140
 catcttgacac actggaagag agtgggaagg gctttgaatc ttttgcattg tacgtgggaa
 1200
 ggcacttttc ggatgatccc ttatcccttg gaaaaggggc acctatttta tccttaccca
 1260
 atctgtacag aaacagcaga ccgagagctg cttccatctt tccatgaagt ctcagtttac
 1320
 ccaaagaagg agcttccctt ctttattctc tttactgctg gattatgttc cttcacagcc
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 1440
 agtgtttgcc tagaggagg ccttggggaa tggatgggga aagccaaggg cataaaagca
 1500
 gcgtgagaga aatgggggtg ccttacagaa atgggtacga gcctgcaaag atcattgctc
 1560
 accatttaat tttcatgatc gtcaatggaa tcaaagcatt aagggtcaaa tgagaaagt
 1620
 caggttgta ctgcatgcct tgccctcatt cacaacaaat tcttagcagt ttccaaaaa
 1680
 tgcaggaggt ccaaaaggat ggaatgatct aggaaatcct agcaaataa aatgtgtggg
 1740
 aagttactcg gttttctgta aattgaatga cattatttcc aatcggtgga tattgtgggt
 1800
 ctttcc
 1806

<210> 5968

<211> 434

<212> PRT

<213> Homo sapiens

<400> 5968

Met	Asp	Phe	Asn	Gly	Val	Gln	Phe	Val	Cys	Arg	Asn	Leu	Leu	Lys	Val
1				5					10					15	
Ser	Met	Phe	Leu	Asn	Thr	Leu	Thr	Pro	Lys	Phe	Tyr	Val	Ala	Leu	Thr
			20					25					30		
Gly	Thr	Ser	Ser	Leu	Ile	Ser	Gly	Leu	Ile	Leu	Ile	Phe	Glu	Trp	Trp
			35				40					45			
Tyr	Phe	Arg	Lys	Tyr	Gly	Thr	Ser	Phe	Ile	Glu	Gln	Val	Ser	Val	Ser
			50				55				60				
His	Leu	Arg	Pro	Leu	Leu	Gly	Gly	Val	Asp	Asn	Asn	Ser	Ser	Asn	Asn
65					70				75					80	
Ser	Asn	Ser	Ser	Asn	Gly	Asp	Ser	Asp	Ser	Asn	Arg	Gln	Ser	Val	Ser
				85					90					95	
Glu	Cys	Lys	Val	Trp	Arg	Asn	Pro	Leu	Asn	Leu	Phe	Arg	Gly	Ala	Glu

	100		105		110
Tyr Asn Arg Tyr Thr Trp Val Thr Gly Arg Glu Pro Leu Thr Tyr Tyr					
115		120		125	
Asp Met Asn Leu Ser Ala Gln Asp His Gln Thr Phe Phe Thr Cys Asp					
130		135		140	
Ser Asp His Leu Arg Pro Ala Asp Ala Ile Met Gln Lys Ala Trp Arg					
145		150		155	160
Glu Arg Asn Pro Gln Ala Arg Ile Ser Ala Ala His Glu Ala Leu Glu					
	165		170		175
Ile Asn Glu Thr Arg His Gln Cys Leu Gly Val His Gln Lys Lys Ala					
	180		185		190
Ser Asn Val Cys Gln Lys Thr Arg Glu Asp Gln Gly Ser Lys Ala Leu					
	195		200		205
Leu Glu Leu Gln Ala Tyr Ala Asp Val Gln Ala Val Leu Ala Lys Tyr					
	210		215		220
Asp Asp Ile Ser Leu Pro Lys Ser Ala Thr Ile Cys Tyr Thr Ala Ala					
225		230		235	240
Leu Leu Lys Ala Arg Ala Val Ser Asp Lys Phe Ser Pro Glu Ala Ala					
	245		250		255
Ser Arg Arg Gly Leu Ser Thr Ala Glu Met Asn Ala Val Glu Ala Ile					
	260		265		270
His Arg Ala Val Glu Phe Asn Pro His Val Pro Lys Tyr Leu Leu Glu					
	275		280		285
Met Lys Ser Leu Ile Leu Pro Pro Glu His Ile Leu Lys Arg Gly Asp					
	290		295		300
Ser Glu Ala Ile Ala Tyr Ala Phe Phe His Leu Ala His Trp Lys Arg					
305		310		315	320
Val Glu Gly Ala Leu Asn Leu Leu His Cys Thr Trp Glu Gly Thr Phe					
	325		330		335
Arg Met Ile Pro Tyr Pro Leu Glu Lys Gly His Leu Phe Tyr Pro Tyr					
	340		345		350
Pro Ile Cys Thr Glu Thr Ala Asp Arg Glu Leu Leu Pro Ser Phe His					
	355		360		365
Glu Val Ser Val Tyr Pro Lys Lys Glu Leu Pro Phe Phe Ile Leu Phe					
	370		375		380
Thr Ala Gly Leu Cys Ser Phe Thr Ala Met Leu Ala Leu Leu Thr His					
385		390		395	400
Gln Phe Pro Glu Leu Met Gly Val Phe Ala Lys Ala Val Ser Val Cys					
	405		410		415
Leu Glu Gly Gly Leu Gly Glu Trp Met Gly Lys Ala Lys Gly Ile Lys					
	420		425		430
Ala Ala					

<210> 5969

<211> 429

<212> DNA

<213> Homo sapiens

<400> 5969

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120

attgagaaga tcttgagcga ggacccccgg tggcaagatg ccaacttcgt gctgggcagc
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 tacaagacgg agcagtgtcc gaagccgcca cgctgtgtcc gccagggcta tgcgtgcccc
 240
 cactaccaca atagccggga caggcgggcg aacccccggc ggttcagta cagggtccacg
 300
 ccctgcccc gcgtaagca cggggatgag tggggggaac cctcacgctg cgatggcggc
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 420
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 429

<210> 5970

<211> 143

<212> PRT

<213> Homo sapiens

<400> 5970

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Gln	Asn	Gly	Gln	Leu	Gly	Gly	Gly	Glu	Gly	Val	Pro	Asp	Leu	Gln	Pro
			20					25					30		
Gly	Val	Leu	Ala	Ser	Gln	Ala	Met	Ile	Glu	Lys	Ile	Leu	Ser	Glu	Asp
		35					40					45			
Pro	Arg	Trp	Gln	Asp	Ala	Asn	Phe	Val	Leu	Gly	Ser	Tyr	Lys	Thr	Glu
	50					55					60				
Gln	Cys	Pro	Lys	Pro	Pro	Arg	Leu	Cys	Arg	Gln	Gly	Tyr	Ala	Cys	Pro
65				70					75					80	
His	Tyr	His	Asn	Ser	Arg	Asp	Arg	Arg	Arg	Asn	Pro	Arg	Arg	Phe	Gln
			85					90						95	
Tyr	Arg	Ser	Thr	Pro	Cys	Pro	Ser	Val	Lys	His	Gly	Asp	Glu	Trp	Gly
			100					105					110		
Glu	Pro	Ser	Arg	Cys	Asp	Gly	Gly	Asp	Gly	Cys	Gln	Tyr	Cys	His	Ser
		115				120					125				
Arg	Thr	Glu	Gln	Gln	Phe	His	Pro	Glu	Ile	Tyr	Lys	Ser	Thr	Lys	
	130					135					140				

<210> 5971

<211> 565

<212> DNA

<213> Homo sapiens

<400> 5971

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 120
 catgtccctt aggtcagcta agccacatc agtgtccaaa taggcaacat ccctatttta
 180
 tagatgggtca tccccatttt agagatagct cctttttata tccccatttt acagggtgaag
 240
 gaattgagggc acagaagggtt aggtcacttc tgcaagatga ccagctgaac caaaatttca
 300

gggtttcaaa caccaaagtgt gttcctttgt cttccgtttc ccacttgett cccagaggct
 360
 cagcaagtag cctctggcca ctgagcatcc tcccgccac tttgctccct gcctcctgat
 420
 cccaggactg tgcccggtgga tgccagagcg aggatgtgaa tcctgttggg ttctgaagcc
 480
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 540
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 565

<210> 5972

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5972

Met	His	Arg	Ala	Leu	Ser	Cys	Pro	Leu	Gly	Gln	Leu	Ser	Pro	His	Gln
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Cys	Pro	Asn	Arg	Gln	His	Pro	Tyr	Phe	Ile	Asp	Gly	His	Pro	His	Phe
			20					25				30			
Arg	Asp	Ser	Ser	Leu	Leu	Tyr	Pro	His	Phe	Thr	Gly	Glu	Gly	Ile	Glu
		35					40					45			
Ala	Gln	Lys	Val	Arg	Ser	Leu	Leu	Gln	Asp	Asp	Gln	Leu	Asn	Gln	Asn
		50				55					60				
Phe	Arg	Ala	Ser	Asn	Thr	Lys	Cys	Val	Pro	Leu	Ser	Ser	Val	Ser	His
65					70					75				80	
Leu	Leu	Pro	Arg	Gly	Ser	Ala	Ser	Ser	Leu	Trp	Pro	Leu	Ser	Ile	Leu
			85						90					95	
Pro	Pro	Thr	Leu	Leu	Pro	Ala	Ser								
							100								

<210> 5973

<211> 797

<212> DNA

<213> Homo sapiens

<400> 5973

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 120
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 300
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 360
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 480

ttgacctca cgggagtaga aggaggcggc gtccgccgcg gccgacggta gttcgcttcc
 540
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 600
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 660
 gtctgtatgt cctcactggt ccttttggga ctttgccttg gcctcgttgc tctcaggatt
 720
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 780
 tttcctcggt ccgaatt
 797

<210> 5974

<211> 107

<212> PRT

<213> Homo sapiens

<400> 5974

Met	Glu	Gly	Ser	Gly	Thr	Gly	Lys	Arg	Arg	Gly	Lys	Ala	Ala	Lys	Thr
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Ser	Leu	Arg	Ile	Met	Asp	Ala	Arg	Ala	Gln	Leu	Leu	Leu	Arg	Val	Pro
			20				25						30		
His	Pro	Gly	Pro	Ser	Leu	Thr	Ser	Gly	Ala	Leu	Thr	His	Ile	Arg	Asp
		35				40					45				
Pro	His	Pro	Gly	Leu	Ser	Pro	Thr	Ser	Gly	Thr	Leu	Met	Pro	Gly	Arg
	50				55					60					
Arg	Arg	Gly	Gly	Pro	Ser	Phe	Gly	Thr	Pro	Ala	Leu	Arg	Arg	Arg	Lys
65				70					75					80	
Cys	His	Arg	Glu	Ala	Pro	Ala	Ser	Gly	Leu	Ser	Thr	Ala	Ala	Arg	Glu
			85					90						95	
Arg	Leu	Trp	Trp	Pro	Arg	Ala	Arg	Val	Cys	Arg					
			100				105								

<210> 5975

<211> 2175

<212> DNA

<213> Homo sapiens

<400> 5975

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 gatgccatcc gggctcttcgc caacatcctc ctctacatcc agaggaccaa gagcatgttc
 120
 cagagggcca cgtacaagta tgagatgatt aacaagcaga atgagcagat gcatgcgctg
 180
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 240
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 360
 aagcaggacc ttgcttatga acgtcagtat gaacagcaaa cctatcaggt gatccctgag
 420

gtgatcaaaa actteatcca gtatttccac aaaactgtct cagatttgat tgaccagaaa
480
gtgtatgagc tacaggccag tcgtgtctcc agtgatgtca ttgaccagaa ggtgtatgag
540
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600
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660
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720
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780
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1020
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1260
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1320
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1920
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1980
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2040

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 2175

<210> 5976

<211> 564

<212> PRT

<213> Homo sapiens

<400> 5976

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Tyr	Ala	Tyr	Pro	Ser	Asp	Tyr	Asp	Met	His	Thr	Gly	Asp	Pro	Lys	Gln
			20					25					30		
Asp	Leu	Ala	Tyr	Glu	Arg	Gln	Tyr	Glu	Gln	Gln	Thr	Tyr	Gln	Val	Ile
		35					40					45			
Pro	Glu	Val	Ile	Lys	Asn	Phe	Ile	Gln	Tyr	Phe	His	Lys	Thr	Val	Ser
	50					55					60				
Asp	Leu	Ile	Asp	Gln	Lys	Val	Tyr	Glu	Leu	Gln	Ala	Ser	Arg	Val	Ser
65					70					75				80	
Ser	Asp	Val	Ile	Asp	Gln	Lys	Val	Tyr	Glu	Ile	Gln	Asp	Ile	Tyr	Glu
			85					90					95		
Asn	Ser	Trp	Thr	Lys	Leu	Thr	Glu	Arg	Phe	Phe	Lys	Asn	Thr	Pro	Trp
			100					105					110		
Pro	Glu	Ala	Glu	Ala	Ile	Ala	Pro	Gln	Val	Gly	Asn	Asp	Ala	Val	Phe
		115					120					125			
Leu	Ile	Leu	Tyr	Lys	Glu	Leu	Tyr	Tyr	Arg	His	Ile	Tyr	Ala	Lys	Val
	130					135					140				
Ser	Gly	Gly	Pro	Ser	Leu	Glu	Gln	Arg	Phe	Glu	Ser	Tyr	Tyr	Asn	Tyr
145					150					155				160	
Cys	Asn	Leu	Phe	Asn	Tyr	Ile	Leu	Asn	Ala	Asp	Gly	Pro	Ala	Pro	Leu
			165						170					175	
Glu	Leu	Pro	Asn	Gln	Trp	Leu	Trp	Asp	Ile	Ile	Asp	Glu	Phe	Ile	Tyr
			180					185					190		
Gln	Phe	Gln	Ser	Phe	Ser	Gln	Tyr	Arg	Cys	Lys	Thr	Ala	Lys	Lys	Ser
		195					200					205			
Glu	Glu	Glu	Ile	Asp	Phe	Leu	Arg	Ser	Asn	Pro	Lys	Ile	Trp	Asn	Val
	210					215						220			
His	Ser	Val	Leu	Asn	Val	Leu	His	Ser	Leu	Val	Asp	Lys	Ser	Asn	Ile
225					230					235				240	
Asn	Arg	Gln	Leu	Glu	Val	Tyr	Thr	Ser	Gly	Gly	Asp	Pro	Glu	Ser	Val
			245						250				255		
Ala	Gly	Glu	Tyr	Gly	Arg	His	Ser	Leu	Tyr	Lys	Met	Leu	Gly	Tyr	Phe
		260					265						270		
Ser	Leu	Val	Gly	Leu	Leu	Arg	Leu	His	Ser	Leu	Leu	Gly	Asp	Tyr	Tyr
	275					280						285			
Gln	Ala	Ile	Lys	Val	Leu	Glu	Asn	Ile	Glu	Leu	Asn	Lys	Lys	Ser	Met
	290					295					300				
Tyr	Ser	Arg	Val	Pro	Glu	Cys	Gln	Val	Thr	Thr	Tyr	Tyr	Tyr	Val	Gly
305					310					315				320	
Phe	Ala	Tyr	Leu	Met	Met	Arg	Arg	Tyr	Gln	Asp	Ala	Ile	Arg	Val	Phe

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<210> 5977
<211> 2320
<212> DNA
<213> Homo sapiens
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5152

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660
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2100

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<210> 5978

<211> 77

<212> PRT

<213> Homo sapiens

<400> 5978

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Ile	Arg	Leu	Gly	Ser	Val	Ala	His	Ala	Cys	Asp	Pro	Ser	Thr	Leu	Gly
		20						25					30		
Gly	Arg	Gly	Gly	Gln	Ile	Ile	Xaa	Ala	Arg	Ser	Ser	Arg	Pro	Ala	Trp
		35					40					45			
Thr	Thr	Trp	Arg	Xaa	Val	Phe	Thr	Lys	Asn	Thr	Lys	Ile	Ser	Trp	Ala
	50					55					60				
Trp	Trp	Tyr	Thr	Pro	Val	Ile	Pro	Ala	Thr	Gln	Glu	Ala			
65					70					75					

<210> 5979

<211> 1095

<212> DNA

<213> Homo sapiens

<400> 5979

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 1095

<210> 5980

<211> 169

<212> PRT

<213> Homo sapiens

<400> 5980

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Ser	Pro	Asp	Arg	Glu	Gly	Thr	Ser	Pro	Asp	Pro	Arg	Cys	Ser	Val	Leu
		20					25					30			
Ser	Gly	Gln	Glu	Asp	Tyr	Asp	Arg	Leu	Arg	Pro	Leu	Ser	Tyr	Gln	Asn
		35				40					45				
Thr	His	Leu	Val	Leu	Ile	Cys	Tyr	Asp	Val	Met	Asn	Pro	Thr	Ser	Tyr
	50					55				60					
Asp	Asn	Val	Leu	Ile	Lys	Trp	Phe	Pro	Glu	Val	Thr	His	Phe	Cys	Arg
65					70				75					80	
Gly	Ile	Pro	Met	Val	Leu	Ile	Gly	Cys	Lys	Thr	Asp	Leu	Arg	Lys	Asp
			85				90					95			
Lys	Glu	Gln	Leu	Arg	Lys	Leu	Arg	Ala	Gln	Leu	Glu	Pro	Ile	Thr	
		100				105					110				
Tyr	Met	Gln	Gly	Leu	Ser	Ala	Cys	Glu	Gln	Ile	Arg	Ala	Ala	Leu	Tyr
	115					120					125				
Leu	Glu	Cys	Ser	Ala	Lys	Phe	Arg	Glu	Asn	Val	Glu	Asp	Val	Phe	Arg
	130				135					140					
Glu	Ala	Ala	Lys	Val	Ala	Leu	Ser	Ala	Leu	Lys	Lys	Ala	Gln	Arg	Gln
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<210> 5981

<211> 677

<212> DNA

<213> Homo sapiens

<400> 5981

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 360
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<210> 5982

<211> 98

<212> PRT

<213> Homo sapiens

<400> 5982

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Arg	Ile	Pro	Lys	Ser	Asp	Asp	Gly	Thr	Arg	Thr	Gly	Arg	Asn	Asp	Ser
			20					25					30		
Pro	Arg	Ala	Pro	Leu	Pro	Arg	Ser	Ser	Ala	Arg	Arg	Pro	Ser	Lys	Ala
			35					40					45		
Asn	Leu	His	Thr	Leu	Gly	Gln	Leu	Lys	Leu	Ser	Arg	Arg	Cys	Arg	Glu
	50					55				60					
Pro	Arg	Leu	Gly	Arg	Ala	Gly	Gln	Gln	Arg	Leu	His	Pro	Arg	Thr	Arg
65					70				75					80	
Pro	Arg	Arg	Gly	Ser	Gly	Pro	Leu	Val	Arg	Ala	Gly	Arg	Arg	Gly	Trp
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Gly Lys

<210> 5983

<211> 790

<212> DNA

<213> Homo sapiens

<400> 5983

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<210> 5984

<211> 186

<212> PRT

<213> Homo sapiens

<400> 5984

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			20				25					30			
Glu	Val	Asn	Arg	Gln	Cys	Pro	Gly	Glu	Lys	Glu	Pro	Val	Ser	Asp	Leu
		35				40					45				
Gln	Leu	Gly	Leu	Asp	Ala	Val	Glu	Pro	Thr	Ala	Leu	His	Lys	Thr	Leu
	50				55			60							
Glu	Thr	Pro	Ala	His	Asp	Arg	Ala	Glu	Pro	Asn	Ser	Gln	Leu	Asp	Ser
65				70				75						80	
Thr	His	Ser	Gly	Arg	Gly	Thr	Met	Tyr	Ser	Ser	Trp	Val	Lys	Ser	Pro
			85				90						95		
Asp	Arg	Thr	Gly	Val	Asn	Phe	Ser	Val	Asn	Ser	Asn	Leu	Arg	Asp	Leu
		100					105					110			
Thr	Pro	Ser	His	Gln	Leu	Glu	Val	Gly	Gly	Gly	Phe	Arg	Ile	Ser	Glu
	115					120					125				
Ser	Lys	Cys	Leu	Met	Gln	Asp	Asp	Thr	Arg	Gly	Met	Phe	Met	Glu	Thr
	130				135					140					
Thr	Val	Phe	Cys	Thr	Ser	Glu	Asp	Gly	Leu	Val	Ser	Gly	Phe	Gly	Arg
145				150					155					160	
Thr	Val	Asn	Asp	Asn	Leu	Ile	Asp	Gly	Asn	Cys	Thr	Pro	Gln	Asn	Pro
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Pro	Gln	Lys	Lys	Lys	Val	Ser	Leu	Leu	Glu						

180

185

<210> 5985

<211> 737

<212> DNA

<213> Homo sapiens

<400> 5985

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<210> 5986

<211> 165

<212> PRT

<213> Homo sapiens

<400> 5986

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Gln	Gln	Val	Cys	Ser	Lys	Gln	Leu	Pro	Pro	Cys	Asn	Leu	Ser	Lys	Glu
		20						25					30		
Asp	Leu	Leu	Gln	Asn	Pro	Tyr	Phe	Ser	Lys	Leu	Leu	Asn	Leu	Ser	
		35					40					45			
Gln	His	Val	Asp	Glu	Ser	Gly	Leu	Ser	Leu	Thr	Leu	Ala	Lys	Glu	Gln
		50				55					60				
Ala	Gln	Ala	Trp	Lys	Glu	Val	Arg	Leu	His	Lys	Thr	Thr	Trp	Leu	Arg
65					70					75				80	
Ser	Glu	Ile	Leu	His	Arg	Val	Ile	Gln	Glu	Leu	Leu	Val	Asp	Tyr	Tyr
				85					90					95	
Val	Lys	Ile	Gln	Asp	Thr	Asn	Val	Thr	Ser	Glu	Asp	Lys	Lys	Phe	His

	100		105		110
Glu Thr Leu Glu Gln Arg Leu Leu Val Thr Glu Leu Met Arg Leu Leu					
	115		120		125
Gly Pro Ser Gln Glu Arg Glu Ile Pro Pro Leu Leu Gly Leu Glu Lys					
	130		135		140
Ala Asp Leu Leu Glu Leu Met Pro Leu Ser Glu Val Gly Gly Glu Ile					
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Leu Glu Pro Asn Lys					
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<210> 5987

<211> 1444

<212> DNA

<213> Homo sapiens

<400> 5987

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1140

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<210> 5988

<211> 216

<212> PRT

<213> Homo sapiens

<400> 5988

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Tyr	His	Val	Val	Thr	Phe	Asp	Tyr	Arg	Gly	Trp	Gly	Asp	Ser	Val	Gly
		20						25					30		
Thr	Pro	Ser	Glu	Arg	Gly	Met	Thr	Tyr	Asp	Ala	Leu	His	Val	Phe	Asp
		35					40					45			
Trp	Ile	Lys	Ala	Arg	Ser	Gly	Asp	Asn	Pro	Val	Tyr	Ile	Trp	Gly	His
	50					55					60				
Ser	Leu	Gly	Thr	Gly	Val	Ala	Thr	Ile	Trp	Cys	Gly	Ala	Ser	Val	Ser
65					70					75				80	
Glu	Thr	Pro	Pro	Asp	Ala	Leu	Ile	Leu	Glu	Ser	Pro	Phe	Thr	Asn	Ile
			85						90					95	
Arg	Glu	Glu	Ala	Lys	Ser	His	Pro	Phe	Ser	Val	Ile	Tyr	Arg	Tyr	Phe
			100						105					110	
Pro	Gly	Phe	Asp	Trp	Phe	Phe	Leu	Asp	Pro	Ile	Thr	Ser	Ser	Gly	Ile
		115					120						125		
Lys	Phe	Ala	Asn	Asp	Glu	Asn	Val	Lys	His	Ile	Ser	Cys	Pro	Leu	Leu
	130					135						140			
Ile	Leu	His	Ala	Glu	Asp	Asp	Pro	Val	Val	Pro	Phe	Gln	Leu	Gly	Arg
145					150					155				160	
Lys	Leu	Tyr	Ser	Ile	Ala	Ala	Pro	Ala	Arg	Ser	Phe	Arg	Asp	Phe	Lys
			165						170					175	
Val	Gln	Phe	Val	Pro	Phe	His	Ser	Asp	Leu	Gly	Tyr	Arg	His	Lys	Tyr
		180						185					190		
Ile	Tyr	Lys	Ser	Pro	Glu	Leu	Pro	Arg	Ile	Leu	Arg	Glu	Phe	Leu	Gly
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<210> 5989

<211> 1583

<212> DNA

<213> Homo sapiens

<400> 5989

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<210> 5990
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 <212> PRT
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 35 40 45
 Val Asn Thr His Val Trp Thr Lys Ser Lys Phe Met Gly Met Ser Val
 50 55 60
 Gly Val Ser Met Ile Gly Glu Gly Val Leu Arg Leu Leu Glu His Gly
 65 70 75 80
 Glu Glu Tyr Val Phe Thr Leu Pro Ser Ala Tyr Ala Arg Ser Ile Leu
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 Thr Ile Pro Trp Val Glu Leu Gly Gly Lys Val Ser Ile Asn Cys Ala
 100 105 110
 Lys Thr Gly Tyr Ser Ala Thr Val Ile Phe His Thr Lys Pro Phe Tyr
 115 120 125
 Gly Gly Lys Val His Arg Val Thr Ala Glu Val Lys His Asn Pro Thr
 130 135 140
 Asn Thr Ile Val Cys Lys Ala His Gly Glu Trp Asn Gly Thr Leu Glu
 145 150 155 160
 Phe Thr Tyr Asn Asn Gly Glu Thr Lys Val Ile Asp Thr Thr Thr Leu
 165 170 175
 Pro Val Tyr Pro Lys Lys Ile Arg Pro Leu Glu Lys Gln Gly Pro Met
 180 185 190
 Glu Ser Arg Asn Leu Trp Arg Glu Val Thr Arg Tyr Leu Arg Leu Gly
 195 200 205
 Asp Ile Asp Ala Ala Thr Glu Gln Lys Arg His Leu Glu Glu Lys Gln
 210 215 220
 Arg Val Glu Glu Arg Lys Arg Glu Asn Leu Arg Thr Pro Trp Lys Pro
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 <212> DNA
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<210> 5992

<211> 301

<212> PRT

<213> Homo sapiens

<400> 5992

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<211> 7858

<212> DNA

<213> Homo sapiens

<400> 5993

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<212> PRT

<213> Homo sapiens

<400> 5994

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<212> DNA

<213> Homo sapiens

<400> 5997

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<211> 72

<212> PRT

<213> Homo sapiens

<400> 5998

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<212> PRT

<213> Homo sapiens

<400> 6000

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Thr Trp Val Leu Asn Thr	Tyr Thr Ser Thr Glu	Met Met Arg Asn Val
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Glu Leu Ala Pro Glu Val	Asp Val Gly Thr Leu	Glu Pro Leu Leu Ser
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465	470	475
Ala Gln Leu Tyr Lys Glu	Glu His Leu Arg Asn	Arg Gln His Pro His
485	490	495
Cys Tyr Val Gln Tyr Met	Ile Ala Ile Ile Asn	Asn Cys Gln Thr Phe
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<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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<210> 6004

<211> 140

<212> PRT

<213> Homo sapiens

<400> 6004

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			20					25					30		
Pro	Ala	Val	Pro	Lys	Val	Ala	Pro	Gly	Thr	Met	Pro	Thr	Arg	Pro	Glu
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Ser	Pro	Arg	Gly	Glu	Arg	Gly	Ser	Gly	Pro	His	Ala	Val	Gln	Gly	Val
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Ala	Leu	Pro	Xaa	Arg	Gly	Ser	Pro	Arg	Gly	Pro	Gly	Pro	Arg	Ala	Pro
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Gly	Arg	Gly	Arg	Asp	Cys	Gly	Gly	Asn	Gly	Pro	Ala	Glu	Ala	Pro	Ala

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 <211> 1735
 <212> DNA
 <213> Homo sapiens

<400> 6005
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<210> 6006

<211> 200

<212> PRT

<213> Homo sapiens

<400> 6006

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Lys	Gly	Gln	Lys	Gly	Asp	Pro	Gly	Glu	Pro	Gly	Pro	Ala	Gly	Leu	Lys
		20						25					30		
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	35					40						45			
Leu	Lys	Gly	Glu	Lys	Gly	Glu	Ser	Ala	Ser	Gln	Pro	Thr	Gly	Glu	Pro
	50					55					60				
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Gly	Pro	Met	Gly	Leu	Gln	Gly	Ile	Gln	Gly	Pro	Lys	Gly	Leu	Asp	Gly
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Pro	Gly	Pro	Val	Gly	Pro	Pro	Gly	Leu	Ile	Gly	Leu	Pro	Gly	Thr	Lys
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Gly	Glu	Lys	Gly	Arg	Pro	Gly	Glu	Pro	Gly	Leu	Asp	Gly	Phe	Pro	Gly
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Pro	Arg	Gly	Glu	Lys	Gly	Asp	Arg	Ser	Glu	Arg	Gly	Glu	Lys	Gly	Glu
145				150					155					160	
Arg	Gly	Val	Pro	Gly	Arg	Lys	Gly	Val	Lys	Gly	Gln	Lys	Gly	Glu	Pro
			165					170					175		
Gly	Pro	Pro	Gly	Leu	Asp	Gln	Pro	Cys	Pro	Val	Gly	Pro	Asp	Gly	Leu
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<210> 6007

<211> 693

<212> DNA

<213> Homo sapiens

<400> 6007

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<210> 6008

<211> 214

<212> PRT

<213> Homo sapiens

<400> 6008

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			20					25					30		
Gly	Lys	Met	Val	Lys	Lys	Val	Cys	Pro	Cys	Asn	Gln	Leu	Cys	Arg	Thr
		35					40					45			
Ser	Ser	Thr	Asn	Thr	Val	Gly	Ala	Thr	Val	Asn	Ser	Gln	Ala	Ala	Gln
		50				55					60				
Ala	Gln	Pro	Pro	Ala	Met	Thr	Ser	Ser	Arg	Lys	Gly	Thr	Phe	Thr	Asp
65					70					75				80	
Asp	Leu	His	Lys	Leu	Val	Asp	Asn	Trp	Ala	Arg	Asp	Ala	Met	Asn	Leu
			85						90				95		
Ser	Gly	Arg	Arg	Gly	Ser	Lys	Gly	His	Met	Asn	Tyr	Glu	Gly	Pro	Gly
			100				105						110		
Met	Ala	Arg	Lys	Phe	Ser	Ala	Pro	Gly	Gln	Leu	Cys	Ile	Ser	Met	Thr
		115					120					125			
Ser	Asn	Leu	Gly	Gly	Ser	Ala	Pro	Ile	Ser	Ala	Ala	Ser	Ala	Thr	Ser
		130				135					140				
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<210> 6010

<211> 468

<212> PRT

<213> Homo sapiens

<400> 6010

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Asp	Thr	Val	Tyr	Asp	Val	Val	Val	Ser	Gly	Gly	Gly	Leu	Val	Gly	Ala
		35					40					45			
Ala	Met	Ala	Cys	Ala	Leu	Gly	Tyr	Asp	Ile	His	Phe	His	Asp	Lys	Lys
	50					55					60				
Ile	Leu	Leu	Leu	Glu	Ala	Gly	Pro	Lys	Lys	Val	Leu	Glu	Lys	Leu	Ser
65				70						75				80	
Glu	Thr	Tyr	Ser	Asn	Arg	Val	Ser	Ser	Ile	Ser	Pro	Gly	Ser	Ala	Thr
				85					90					95	
Leu	Leu	Ser	Ser	Phe	Gly	Ala	Trp	Asp	His	Ile	Cys	Asn	Met	Arg	Tyr
			100					105					110		
Arg	Ala	Phe	Arg	Arg	Met	Gln	Val	Trp	Asp	Ala	Cys	Ser	Glu	Ala	Leu
	115					120					125				
Ile	Met	Phe	Asp	Lys	Asp	Asn	Leu	Asp	Asp	Met	Gly	Tyr	Ile	Val	Glu
	130					135					140				
Asn	Asp	Val	Ile	Met	His	Ala	Leu	Thr	Lys	Gln	Leu	Glu	Ala	Val	Ser
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Pro	Cys	Pro	Phe	Pro	Met	Ala	Asp	Ser	Ser	Pro	Trp	Val	His	Ile	Thr
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Phe	Val Asp Ala Val Asn Ser Ala Phe Trp Ser Asp Ala Asp His Thr				
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305		310		315	320
Leu	Lys Pro Thr Lys Val Ser Ala Arg Gln Leu Pro Pro Ser Val Pro				
	325		330		335
Trp	Val Asp Ala Lys Ser Arg Val Leu Phe Pro Leu Gly Leu Gly His				
	340		345		350
Ala	Ala Glu Tyr Val Arg Pro Arg Val Ala Leu Ile Gly Asp Ala Ala				
	355		360		365
His	Arg Val His Pro Leu Ala Gly Gln Gly Val Asn Met Gly Phe Gly				
	370		375		380
Asp	Ile Ser Ser Leu Ala His His Leu Ser Thr Ala Ala Phe Asn Gly				
385		390		395	400
Lys	Asp Leu Gly Ser Val Ser His Leu Thr Gly Tyr Glu Thr Glu Arg				
	405		410		415
Gln	Arg His Asn Thr Ala Leu Leu Ala Ala Thr Asp Leu Leu Lys Arg				
	420		425		430
Leu	Tyr Ser Thr Ser Ala Ser Pro Leu Val Leu Leu Arg Thr Trp Gly				
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Leu	Gln Ala Thr Asn Ala Val Ser Pro Leu Lys Glu Gln Ile Met Ala				
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<210> 6011

<211> 1331

<212> DNA

<213> Homo sapiens

<400> 6011

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<210> 6012

<211> 219

<212> PRT

<213> Homo sapiens

<400> 6012

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			20					25					30		
Lys	Glu	Pro	Gly	Asp	Ser	Ala	Gln	Phe	Thr	Lys	Ala	Ile	Ala	Ile	Ile
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Phe	Pro	Phe	Leu	Tyr	Leu	Leu	Glu	Lys	Val	Glu	Cys	Thr	Pro	Ser	Gln
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			115					120				125			
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<210> 6013

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<212> DNA

<213> Homo sapiens

<400> 6013

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<212> PRT

<213> Homo sapiens

<400> 6014

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<213> Homo sapiens

<400> 6018

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Pro Tyr Lys Tyr Pro Arg Lys Ile Glu Phe Val Leu Asn Leu Pro Lys
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<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 6020

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<211> 708

<212> PRT

<213> Homo sapiens

<400> 6022

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<211> 1014

<212> DNA

<213> Homo sapiens

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<211> 496

<212> PRT

<213> Homo sapiens

<400> 6026

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<212> PRT

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His	Leu	Leu	Val	Leu	Lys	Ala	Leu	Gln	Asp	Gly	Arg	Ala	Tyr	Gly
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Glu	Tyr	Lys	Tyr	Asn	Val	Glu	Ala	Val	Glu	Leu	Leu	Ile	Arg	Asn
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Ile	Leu	Leu	Val	Asp	Glu	Arg	Ser	Val	Ala	His	Val	Thr	Glu	Ala
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Phe	Gln	Gln	Leu	Pro	Tyr	His	Arg	Ile	Phe	Ile	Met	Leu	Leu	Leu	Glu						
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Ala	Arg	Met	Leu	Ala	His	Thr	Pro	Gln	Gln	Lys	Gly	Trp	Pro	Met	Tyr						
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Gln	Ala	Ile	Ala	His	Ile	His	Asn	Lys	Gly	Ser	Thr	Pro	Ser	Met	Ser						
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Gly	Leu	Leu	Ile	Thr	Phe	Ile	Glu	Leu	Ile	Lys	Asn	Pro	Ala	Phe	Lys						
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 <212> DNA
 <213> Homo sapiens

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<210> 6036
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 6036
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 Arg Gln Val Leu Gln Glu Pro Ser Arg Glu Pro Pro Gly Trp Leu Gly
 35 40 45
 Ala Trp Pro Arg Ser Gln Ser His Asn Ala His His Cys Pro Thr Met
 50 55 60
 Pro Phe Arg Met Glu Pro Leu Ile His Trp Ala His Ser His Gly Gln
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 <211> 3910
 <212> DNA
 <213> Homo sapiens

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<211> 214

<212> PRT

<213> Homo sapiens

<400> 6038

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His	Gly	Gly	Thr	Cys	Ser	Arg	Gln	Glu	Leu	Gly	Val	Ser	Asp	Val	Leu
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Thr	Val	Leu	Leu	Leu	Arg	Val	Ile	Ala	Ala	Phe	Cys	Phe	Leu	Gly	Ile
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Leu	Cys	Ser	Leu	Ser	Ala	Phe	Leu	Leu	Asp	Val	Phe	Gly	Pro	Lys	His
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Pro	Ala	Leu	Lys	Ile	Thr	Arg	Arg	Tyr	Ala	Phe	Ala	His	Ile	Leu	Thr
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Val	Leu	Gln	Cys	Ala	Thr	Val	Ile	Gly	Phe	Ser	Tyr	Trp	Ala	Ser	Glu
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Leu	Ile	Leu	Ala	Gln	Gln	Gln	Gln	His	Lys	Lys	Tyr	His	Gly	Ser	Gln
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		180						185				190			
Asn	Glu	Pro	Tyr	Pro	Ala	Glu	Tyr	Glu	Val	Ile	Asn	Gln	Phe	Gln	Pro
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<212> DNA
<213> Homo sapiens

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<211> 312
<212> PRT
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 35 40 45
 Gln Asn Val Val Pro Glu Ala Glu Gly Glu Asp Asp Pro Ala Gly Glu
 50 55 60
 Ala Gln Ala Gly Arg Leu Pro Leu Leu Pro Cys Ala Arg Ala Tyr Val
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 Ser Pro Arg Ala Pro Phe Tyr Arg Pro Leu Ala Pro Glu Leu Arg Ala
 85 90 95
 Arg Gln Leu Glu Leu Gly Ala Glu His Ala Leu Leu Leu Asp Ala Ala
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 Gly Gln Val Phe Ser Trp Gly Gly Arg His Gly Gln Leu Gly His
 115 120 125
 Gly Thr Leu Glu Ala Glu Leu Glu Pro Arg Leu Leu Glu Ala Leu Gln
 130 135 140
 Gly Leu Val Met Ala Glu Val Ala Ala Gly Gly Trp His Ser Val Cys
 145 150 155 160
 Val Ser Glu Thr Gly Asp Ile Tyr Ile Trp Gly Trp Asn Glu Ser Gly
 165 170 175
 Gln Leu Ala Leu Pro Thr Arg Asn Leu Ala Glu Asp Gly Glu Thr Val
 180 185 190
 Ala Arg Glu Ala Thr Glu Leu Asn Glu Asp Gly Ser Gln Val Lys Arg
 195 200 205
 Thr Gly Gly Ala Glu Asp Gly Ala Pro Ala Pro Phe Ile Ala Val Gln
 210 215 220
 Pro Phe Pro Ala Leu Leu Asp Leu Pro Met Gly Ser Asp Ala Val Lys
 225 230 235 240
 Ala Ser Cys Gly Ser Arg His Thr Ala Val Val Thr Arg Thr Gly Glu
 245 250 255
 Leu Tyr Thr Trp Gly Trp Gly Lys Tyr Gly Gln Leu Gly His Glu Asp
 260 265 270
 Thr Thr Ser Leu Asp Arg Pro Arg Arg Val Glu Tyr Phe Val Asp Lys
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<210> 6041

<211> 291

<212> DNA

<213> Homo sapiens

<400> 6041

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<210> 6042
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<212> PRT
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35 40 45
Ile Met Ala Ala Leu Asn Ser Gln Thr Ala Val Gln Phe Gln Gln Tyr
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Ala Ala Gln Gln Tyr Pro Gly Asn Tyr Glu Gln Gln Gln Ile Leu Ile
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Arg Gln Leu Gln Glu Gln His Tyr Gln Gln Tyr Met Gln Gln Leu Tyr
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<210> 6043
<211> 558
<212> DNA
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420
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558

<210> 6044
<211> 152
<212> PRT
<213> Homo sapiens

<400> 6044

Met Leu Cys Gln Thr Pro Gly Ala Ala Thr Pro Met Glu Leu Gln Asp
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 Cys Tyr Leu Ser Asn Val Asp Gly Gly Glu His Pro Cys Pro Arg Leu
 20 25 30
 Lys Ile Ala Pro Leu Glu Ser His His Arg Pro Lys Arg Pro Asp Asp
 35 40 45
 Pro Pro Gly Thr Leu Asn Pro Cys Pro Glu Arg Gly Gly Ala Gly Val
 50 55 60
 Trp Ile Pro Ala Gly Ser Phe Gly Thr Gly Lys Asn Arg Gly Cys Ser
 65 70 75 80
 Asp Arg Val Phe Thr Lys Thr Cys Ile Arg Gln Asp Pro Gly Arg Met
 85 90 95
 Trp Val Ala Pro Pro Leu Cys Trp Ala Arg Arg Met Cys Pro His Arg
 100 105 110
 Ser Gln Ile Leu Phe Pro Gln Trp Val Val Gln Asp Thr Leu Asn Phe
 115 120 125
 Cys Met Asn Trp Asp Ile Gln Asn Ser Leu Glu Gln Pro Pro Pro Ser
 130 135 140
 Thr Leu Cys Leu Asp Ile Ser Tyr
 145 150

<210> 6045

<211> 1916

<212> DNA

<213> Homo sapiens

<400> 6045

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 120
 gtgttcacag acatcgacat ctccagagac ctgcaagaaa tatgcaggaa acagggagtt
 180
 gctgtgtata tccttctgga ccaggctctc ctctctcaat ttctggatat gtgcatggat
 240
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 300
 tactatgcaa ggtcaggaac taagattatt gggaagggtc acgaaaagtt cacgttgatt
 360
 gatggcatcc gcgtggcaac aggtcctac agttttacat ggacggatgg caaattaaac
 420
 agcagtaact tgtaattct gtctggccaa gtggttgaac actttgatct ggagttccga
 480
 atcctgtatg ccagtcctaa gcccatcagc cccaaactcc tgtctcactt ccagagcagc
 540
 aacaagtttg atcacctcac caaccgaaaa ccacagtcca aggagctcac cctgggcaac
 600
 ctgctgcgga tgcggctggc taggtgttca agtaactcca ggaaggcgga cctggaccca
 660
 gagatgcccg cagagggcaa ggcagagcgc aagccccatg actgtgagtc ctctactgtt
 720
 agtgaggaag actacttcag cagccacagg gacgagctcc agagcagaaa ggccattgac
 780

gctgccactc aaacagagcc aggagaggag atgccagggc tgagtgtgag tgaggtggga
 840
 acacaaacca gcataccac agcatgtgct ggtaccaga ctgcagtcac caccaggata
 900
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 960
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 1020
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 1080
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 1140
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 1200
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 1320
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 1620
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 1680
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 1740
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 1800
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 1860
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 1916

<210> 6046

<211> 457

<212> PRT

<213> Homo sapiens

<400> 6046

Thr	Arg	Val	Glu	Thr	His	Phe	Gln	Pro	Arg	Gly	Ala	Gly	Glu	Gly	Gly
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Pro	Tyr	Gly	Cys	Lys	Asp	Ala	Leu	Arg	Gln	Gln	Leu	Arg	Ser	Ala	Arg
		20					25				30				
Glu	Val	Ile	Ala	Val	Val	Met	Asp	Val	Phe	Thr	Asp	Ile	Asp	Ile	Phe
	35					40				45					
Arg	Asp	Leu	Gln	Glu	Ile	Cys	Arg	Lys	Gln	Gly	Val	Ala	Val	Tyr	Ile
	50				55				60						
Leu	Leu	Asp	Gln	Ala	Leu	Leu	Ser	Gln	Phe	Leu	Asp	Met	Cys	Met	Asp

65					70					75				80	
Leu	Lys	Val	His	Pro	Glu	Gln	Glu	Lys	Leu	Met	Thr	Val	Arg	Thr	Ile
				85					90					95	
Thr	Gly	Asn	Ile	Tyr	Tyr	Ala	Arg	Ser	Gly	Thr	Lys	Ile	Ile	Gly	Lys
			100					105					110		
Val	His	Glu	Lys	Phe	Thr	Leu	Ile	Asp	Gly	Ile	Arg	Val	Ala	Thr	Gly
		115					120				125				
Ser	Tyr	Ser	Phe	Thr	Trp	Thr	Asp	Gly	Lys	Leu	Asn	Ser	Ser	Asn	Leu
	130					135					140				
Val	Ile	Leu	Ser	Gly	Gln	Val	Val	Glu	His	Phe	Asp	Leu	Glu	Phe	Arg
145					150					155					160
Ile	Leu	Tyr	Ala	Gln	Ser	Lys	Pro	Ile	Ser	Pro	Lys	Leu	Leu	Ser	His
				165					170					175	
Phe	Gln	Ser	Ser	Asn	Lys	Phe	Asp	His	Leu	Thr	Asn	Arg	Lys	Pro	Gln
			180					185					190		
Ser	Lys	Glu	Leu	Thr	Leu	Gly	Asn	Leu	Leu	Arg	Met	Arg	Leu	Ala	Arg
		195					200					205			
Leu	Ser	Ser	Thr	Pro	Arg	Lys	Ala	Asp	Leu	Asp	Pro	Glu	Met	Pro	Ala
	210					215					220				
Glu	Gly	Lys	Ala	Glu	Arg	Lys	Pro	His	Asp	Cys	Glu	Ser	Ser	Thr	Val
225					230					235					240
Ser	Glu	Glu	Asp	Tyr	Phe	Ser	Ser	His	Arg	Asp	Glu	Leu	Gln	Ser	Arg
			245					250						255	
Lys	Ala	Ile	Asp	Ala	Ala	Thr	Gln	Thr	Glu	Pro	Gly	Glu	Glu	Met	Pro
			260					265					270		
Gly	Leu	Ser	Val	Ser	Glu	Val	Gly	Thr	Gln	Thr	Ser	Ile	Thr	Thr	Ala
		275					280					285			
Cys	Ala	Gly	Thr	Gln	Thr	Ala	Val	Ile	Thr	Arg	Ile	Ala	Ser	Ser	Gln
	290					295					300				
Thr	Thr	Ile	Trp	Ser	Arg	Ser	Thr	Thr	Thr	Gln	Thr	Asp	Met	Asp	Glu
305					310					315					320
Asn	Ile	Leu	Phe	Pro	Arg	Gly	Thr	Gln	Ser	Thr	Glu	Gly	Ser	Pro	Val
				325					330					335	
Ser	Lys	Met	Ser	Val	Ser	Arg	Ser	Ser	Ser	Leu	Lys	Ser	Ser	Ser	Ser
		340						345					350		
Val	Ser	Ser	Gln	Gly	Ser	Val	Ala	Ser	Ser	Thr	Gly	Ser	Pro	Ala	Ser
		355					360					365			
Ile	Arg	Thr	Thr	Asp	Phe	His	Asn	Pro	Gly	Tyr	Pro	Lys	Tyr	Leu	Gly
	370					375					380				
Thr	Pro	His	Leu	Glu	Leu	Tyr	Leu	Ser	Asp	Ser	Leu	Arg	Asn	Leu	Asn
385					390					395					400
Lys	Glu	Arg	Gln	Phe	His	Phe	Ala	Gly	Ile	Arg	Ser	Arg	Leu	Asn	His
			405					410						415	
Met	Leu	Ala	Met	Leu	Ser	Arg	Arg	Thr	Leu	Phe	Thr	Glu	Asn	His	Leu
		420						425					430		
Gly	Leu	His	Ser	Gly	Asn	Phe	Ser	Arg	Val	Asn	Leu	Leu	Ala	Val	Arg
	435					440						445			
Asp	Val	Ala	Leu	Tyr	Pro	Ser	Tyr	Gln							
	450					455									

<210> 6047

<211> 773

<212> DNA

<213> Homo sapiens

<400> 6047

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 120
 gatgggaaat gggggatctc atcgcttggt agtagaggag actttggggg gaaagtgatg
 180
 gaggatgggg caagggatcc ggtgtccaac tctgtgtgtc cctgcagctc ccgtagccca
 240
 gcagggaaga tgaccttctg gccctaagc aggcggaagg cagggtggcg ccgccggagc
 300
 aatgggtgcaa acagctcttc tccagtgtgg tccccgtgt gctggggggac ccagaggagg
 360
 agccgggtgg gcggcagctc ctggacctca attgcttttt gtccgacatc tcggacactc
 420
 tcttcaccat gactcagtcc ggcccttcgc cctgcagct gccgcctgag gatgcctacg
 480
 tcggcaatgc tgacatgac cagccggacc tgacgccact gcagccaagc ctggatgact
 540
 tcatggacat ctgagatttc tttaccaact cccgcctccc acagccgccc atgccttcaa
 600
 acttcccaga gcccccaac ttcagccccg tggttgactc cctcttcagc agtgggaccc
 660
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 720
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 773

<210> 6048

<211> 129

<212> PRT

<213> Homo sapiens

<400> 6048

Met Val Lys Arg Val Ser Glu Met Ser Asp Lys Lys Gln Leu Arg Ser
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 Arg Ser Cys Arg Pro Pro Gly Ser Ser Ser Gly Ser Pro Ser Ser Thr
 20 25 30
 Gly Thr Thr Leu Glu Lys Ser Cys Leu His His Cys Ser Gly Gly Gly
 35 40 45
 His Leu Pro Ser Ala Cys Leu Gly Ala Arg Arg Ser Ser Ser Leu Leu
 50 55 60
 Gly Tyr Gly Ser Cys Arg Asp Thr Gln Ser Trp Thr Pro Asp Pro Leu
 65 70 75 80
 Pro His Pro Pro Ser Leu Ser Pro Gln Ser Leu Leu Tyr Ser Gln Ala
 85 90 95
 Met Arg Ser Pro Ile Ser His Gln Glu Leu Thr Arg Pro Leu Gly Lys
 100 105 110
 Glu Ala Ala Arg Arg Arg Cys Gly His Thr Val Ala Leu Ser Ala Arg
 115 120 125
 Asp

<210> 6049

<211> 479

<212> DNA

<213> Homo sapiens

<400> 6049

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120
agcagcagta gcagcagtaa cagtagtaac gagagagaag actttgattc cacctcttcc
180
tcctcttcca ctctccttt acaaccagg gattcggcac ccccttcaac ctgctcttc
240
tgcttggggg ttccagtggc tgcttcagc cacgtaccga tacagaagaa gctgcgtttt
300
gaagacaccc tggagtgtgt agggtttgat gcgaagatgg ctgaggaatc ctctcctcc
360
tcctcctcat cttaccaaac tgctgcaaca tctcaggagc agcaacttaa aaataagagt
420
atattaatct cttctgtggg ttcggtgcat catgcagacg ggctagccga atcttctac
479

<210> 6050

<211> 159

<212> PRT

<213> Homo sapiens

<400> 6050

Thr	Gly	Phe	Ser	Ser	Pro	Ser	Pro	Ser	Ala	Ala	Ala	Ala	Ala	Gln	Glu
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Val	Arg	Ser	Ala	Thr	Asp	Gly	Asn	Thr	Ser	Thr	Thr	Pro	Pro	Thr	Ser
			20					25					30		
Ala	Lys	Lys	Arg	Lys	Leu	Asn	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Asn	Ser
			35				40					45			
Ser	Asn	Glu	Arg	Glu	Asp	Phe	Asp	Ser	Thr	Ser	Ser	Ser	Ser	Ser	Thr
	50				55					60					
Pro	Pro	Leu	Gln	Pro	Arg	Asp	Ser	Ala	Ser	Pro	Ser	Thr	Ser	Ser	Phe
65					70					75				80	
Cys	Leu	Gly	Val	Ser	Val	Ala	Ala	Ser	Ser	His	Val	Pro	Ile	Gln	Lys
			85						90					95	
Lys	Leu	Arg	Phe	Glu	Asp	Thr	Leu	Glu	Phe	Val	Gly	Phe	Asp	Ala	Lys
			100					105					110		
Met	Ala	Glu	Glu	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Pro	Thr	Ala
	115					120						125			
Ala	Thr	Ser	Gln	Glu	Gln	Gln	Leu	Lys	Asn	Lys	Ser	Ile	Leu	Ile	Ser
	130					135						140			
Ser	Val	Gly	Ser	Val	His	His	Ala	Asp	Gly	Leu	Ala	Glu	Ser	Ser	
145					150					155					

<210> 6051

<211> 2404

<212> DNA

<213> Homo sapiens

<400> 6051

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120
ttacagcagc gtcagatttaa tggctcagac ggaggggttt catggtctcc tatggatgat
180
gaacttcttg cacagccaca gggtatgaaa ttattagatt cactccgaga gcaatatacc
240
cgctaccagg aagttttagt gcaacgtagc aagcgcacac agttagaaga gattcaacag
300
aaggtaatgc aggtggtgaa ctggctagaa gggcctggat cagaacaact aagagcccag
360
tggggcattg gagactccat tagggcctcc caggccctac agcagaaaca cgaagagatt
420
gagagccagc acagtgaatg gtttgcagtg tatgtggaac ttaatcagca aattgcagca
480
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540
agtgtatgtt gttatcgaca ggccagtcag ctggaattta ggcaaaatct cttacaagca
600
gctcttgaat ttcattggtt tgcccaagat ttgtctcagc agttggatgg cttattaggg
660
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720
cttgaagaga agctgaaaag tgttgatgtg ggattgcaag gtttgcgtga aaaagggtcaa
780
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840
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900
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1020
gctctgctta agactcacat cagattgggc gatgatgctc aagaaacgaa agttttgctg
1080
gaaaagcata gaaaatttgt tgatgttgca cagagcactt atgactatgg caggcagttg
1140
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1200
acacttcctc gactgaacag agtatggaaa caatttaca tagcatctga agagagagta
1260
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1320
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1380
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1500
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1560

ctaccagcta cctacagatt tgcagttcat aatccccgcat gttgtcaaca tactacagca
 1620
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 1800
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 1860
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 1920
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 1980
 cctcaaaatt ttactttgta attcttcaga attgattatt tttattgtgt caatacagag
 2040
 aaagcctttc agatctttga tatatcatag tcattaaaag accttttcct atttgtattg
 2100
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 2160
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 2220
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 2280
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 2400
 caac
 2404

<210> 6052

<211> 518

<212> PRT

<213> Homo sapiens

<400> 6052

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Val	Asp	Leu	Asn	Phe	Leu	Pro	Ser	Val	Asp	Pro	Glu	Thr	Val	Leu	Gln
			20					25					30		
Thr	Gly	His	Glu	Leu	Leu	Ser	Glu	Leu	Gln	Gln	Arg	Arg	Phe	Asn	Gly
		35					40					45			
Ser	Asp	Gly	Gly	Val	Ser	Trp	Ser	Pro	Met	Asp	Asp	Glu	Leu	Leu	Ala
	50					55				60					
Gln	Pro	Gln	Val	Met	Lys	Leu	Leu	Asp	Ser	Leu	Arg	Glu	Gln	Tyr	Thr
65				70					75					80	
Arg	Tyr	Gln	Glu	Val	Cys	Arg	Gln	Arg	Ser	Lys	Arg	Thr	Gln	Leu	Glu
				85					90					95	
Glu	Ile	Gln	Gln	Lys	Val	Met	Gln	Val	Val	Asn	Trp	Leu	Glu	Gly	Pro
			100				105					110			
Gly	Ser	Glu	Gln	Leu	Arg	Ala	Gln	Trp	Gly	Ile	Gly	Asp	Ser	Ile	Arg
		115					120					125			
Ala	Ser	Gln	Ala	Leu	Gln	Gln	Lys	His	Glu	Glu	Ile	Glu	Ser	Gln	His

130	135	140
Ser Glu Trp Phe Ala Val Tyr Val Glu Leu Asn Gln Gln Ile Ala Ala		
145	150	155
Leu Leu Asn Ala Gly Asp Glu Glu Asp Leu Val Glu Leu Lys Ser Leu		160
	165	170
Gln Gln Gln Leu Ser Asp Val Cys Tyr Arg Gln Ala Ser Gln Leu Glu		175
	180	185
Phe Arg Gln Asn Leu Leu Gln Ala Ala Leu Glu Phe His Gly Val Ala		190
	195	200
Gln Asp Leu Ser Gln Gln Leu Asp Gly Leu Leu Gly Met Leu Cys Val		205
	210	215
Asp Val Ala Pro Ala Asp Gly Ala Ser Ile Gln Gln Thr Leu Lys Leu		220
225	230	235
Leu Glu Glu Lys Leu Lys Ser Val Asp Val Gly Leu Gln Gly Leu Arg		240
	245	250
Glu Lys Gly Gln Gly Leu Leu Asp Gln Ile Ser Asn Gln Ala Ser Xaa		255
	260	265
Gly Pro Met Glu Arg Met Xaa Thr Ile Glu Asn Lys Glu Asn Val Asp		270
	275	280
His Ile Gln Gly Val Met Glu Asp Met Gln Leu Arg Lys Gln Arg Cys		285
	290	295
Glu Asp Met Val Asp Val Arg Arg Leu Lys Met Leu Gln Met Val Gln		300
305	310	315
Leu Phe Lys Cys Glu Glu Asp Ala Ala Lys Ala Val Glu Trp Leu Ser		320
	325	330
Glu Leu Leu Asp Ala Leu Leu Lys Thr His Ile Arg Leu Gly Asp Asp		335
	340	345
Ala Gln Glu Thr Lys Val Leu Leu Glu Lys His Arg Lys Phe Val Asp		350
	355	360
Val Ala Gln Ser Thr Tyr Asp Tyr Gly Arg Gln Leu Leu Gln Ala Thr		365
	370	375
Val Val Leu Cys Gln Ser Leu Arg Cys Thr Ser Arg Ser Ser Gly Asp		380
385	390	395
Thr Leu Pro Arg Leu Asn Arg Val Trp Lys Gln Phe Thr Ile Ala Ser		400
	405	410
Glu Glu Arg Val His Arg Leu Glu Met Ala Ile Ala Phe His Ser Asn		415
	420	425
Ala Glu Lys Ile Leu Gln Asp Cys Pro Glu Glu Pro Glu Ala Ile Asn		430
	435	440
Asp Glu Glu Gln Phe Asp Glu Ile Glu Ala Val Gly Lys Ser Leu Leu		445
	450	455
Asp Arg Leu Thr Val Pro Val Val Tyr Pro Asp Gly Thr Glu Gln Tyr		460
465	470	475
Phe Gly Ser Pro Ser Asp Met Ala Ser Thr Ala Glu Asn Ile Arg Asp		480
	485	490
Arg Met Lys Leu Val Asn Leu Lys Arg Gln Gln Leu Arg His Pro Glu		495
	500	505
Met Val Thr Thr Glu Ser		510
	515	

<210> 6053

<211> 3257

<212> DNA

<213> Homo sapiens

<400> 6053
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120
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180
gtttatcggg aggagattgt cttccagggc tagcaattgg acttttgatg atgtttgacc
240
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300
tcgtgtaatc gcaaaaccca ttttgagca ggaattccaa tcattgtctgt gatggtggtg
360
agaaagaagg tgacacggaa atgggagaaa ctcccaggca ggaacacctt ttgctgtgat
420
ggccgcgtca tgatggccc gcaaaagggc attttctacc tgaccctttt cctcatcctg
480
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600
agcttcagt accctggagt gattcctcgg gcgctaccag atgaagcagc tttcatagaa
660
atggagatag aagctacca tgggtgcggtg ccccagggcc agagaccacc gcctcgtatc
720
aagaatttcc agataaaca ccagattgtg aaactgaaat actgttacac atgcaagatc
780
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<211> 382

<212> PRT

<213> Homo sapiens

<400> 6054

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<211> 285

<212> PRT

<213> Homo sapiens

<400> 6056

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<210> 6057

<211> 3924

<212> DNA

<213> Homo sapiens

<400> 6057

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<211> 500

<212> PRT

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<400> 6058

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 Tyr His Gly Gly Ser Ser Arg Ser Arg Ser Ser Ile Phe His Ala Gly
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 Asp Asp Ser Phe Asn Leu His Asn Ser Asn Ser Thr His Gln Glu Arg
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 370 375 380
 Asn Ala Ser Val Ile Ser Gln Gln Ile Ile Arg Ser Ser Thr Phe Pro
 385 390 395 400
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 405 410 415
 Lys Glu Met Gly Trp Gln Glu Asp Ser Glu Asn Asp Glu Thr Cys Ala

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Pro	Leu Thr	Glu Asp	Glu Met	Arg Glu	Phe Gln Val
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Leu	Gln Lys	Asn Gly	Leu Arg	Lys Asn	Gly Ile
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Ile	Cys Asp	Phe Lys	Phe Gly	Pro Trp	Lys Asn
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<210> 6059

<211> 1442

<212> DNA

<213> Homo sapiens

<400> 6059

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<210> 6060

<211> 313

<212> PRT

<213> Homo sapiens

<400> 6060

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 Asn Leu Ser Ile Leu Asp Leu Cys Tyr Thr Thr Thr Thr Val Pro His
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 Cys Val Ala His Leu Ile Ile Phe Leu Ala Leu Gly Ala Thr Glu Cys
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 115 120 125
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 145 150 155 160
 Ser Leu Thr Leu Asn Met Pro Arg Cys Gly His Gln Glu Val Asp His
 165 170 175
 Phe Phe Cys Glu Val Pro Ala Leu Leu Lys Leu Ser Cys Ala Asp Thr
 180 185 190
 Lys Pro Ile Glu Ala Glu Leu Phe Phe Ser Val Leu Ile Leu Leu
 195 200 205
 Ile Pro Val Thr Leu Ile Leu Ile Ser Tyr Gly Phe Ile Ala Gln Ala
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 Val Leu Lys Ile Arg Ser Ala Glu Gly Arg Gln Lys Ala Phe Gly Thr
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<210> 6061

<211> 1582

<212> DNA

<213> Homo sapiens

<400> 6061

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1200

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<210> 6062

<211> 226

<212> PRT

<213> Homo sapiens

<400> 6062

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<210> 6063

<211> 2286

<212> DNA

<213> Homo sapiens

<400> 6063

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<210> 6064

<211> 233

<212> PRT

<213> Homo sapiens

<400> 6064

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Glu	Glu	Tyr	Thr	Thr	Gly	Met	Ala	Asp	Cys	Ile	Leu	Val	Asn	Ser	Gln
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<210> 6065

<211> 2084

<212> DNA

<213> Homo sapiens

<400> 6065

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<210> 6066

<211> 80

<212> PRT

<213> Homo sapiens

<400> 6066

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		20						25					30		
Ala	Ile	Asp	Lys	Pro	Thr	Tyr	Ala	Thr	Lys	Trp	Pro	Ile	Arg	His	Gly
		35					40						45		
Ile	Ile	Glu	Asp	Trp	Asp	Leu	Met	Glu	Arg	Phe	Met	Glu	Gln	Val	Val
	50					55					60				
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<210> 6067

<211> 406

<212> DNA

<213> Homo sapiens

<400> 6067

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<211> 117

<212> PRT

<213> Homo sapiens

<400> 6068

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Ser	Leu	Phe	Leu	Ser	Gly	Asn	Val	Ser	Ser	Arg	Arg	Met	Arg	Thr	Ala
		35					40					45			
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Pro	Gly	Leu	Pro	Phe	Gly	Gln	Gly	Ala	Val	Ala	Arg	Ala	Ala	Pro	Cys
65					70				75					80	
Pro	Ala	Tyr	Ser	His	Ser	Ala	Val	Gly	Arg	Pro	Pro	Leu	Pro	Arg	Lys
			85						90					95	
Arg	Gly	Ala	Val	Ser	Ser	Gly	Arg	Leu	His	Arg	Arg	Gly	Thr	Gly	Ala
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Met	Trp	Trp	Glu	Gly											
			115												

<210> 6069

<211> 456

<212> DNA

<213> Homo sapiens

<400> 6069

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 120
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 180

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 300
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 420
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 456

<210> 6070

<211> 148

<212> PRT

<213> Homo sapiens

<400> 6070

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Asn	Val	Lys	Gln	Ile	Ile	Pro	Met	Val	Thr	Glu	Leu	Ile	Gly	Arg	Ser
		20					25						30		
His	Arg	Tyr	His	Arg	Lys	Glu	Asn	Leu	Glu	Tyr	Cys	Ile	Met	Val	Ile
		35				40					45				
Gly	Val	Pro	Asn	Val	Gly	Lys	Ser	Ser	Leu	Ile	Asn	Ser	Leu	Arg	Arg
	50				55				60						
Gln	His	Leu	Arg	Lys	Gly	Lys	Ala	Thr	Arg	Val	Gly	Gly	Glu	Pro	Gly
65				70					75					80	
Ile	Thr	Arg	Ala	Val	Met	Ser	Lys	Ile	Gln	Val	Glu	Ser	Ser	Gly	Ala
			85					90						95	
Arg	Pro	Ser	Thr	Leu	Ser	Arg	Ala	Leu	Gln	Ala	Ser	Gly	Thr	Cys	Arg
		100					105					110			
Pro	Leu	Cys	Gly	Phe	Arg	Leu	Leu	Thr	Thr	Leu	Pro	Ser	Pro	Pro	Leu
	115					120					125				
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	130					135					140				
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<210> 6071

<211> 2633

<212> DNA

<213> Homo sapiens

<400> 6071

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 120
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 180
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 240
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tcaaaagtgtg gatttttttt tctcagtgc ataagaaaga tgacttactt cacaagtgtg
360
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420
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480
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720
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<210> 6072

<211> 76

<212> PRT

<213> Homo sapiens

<400> 6072

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Ala	Glu	Ala	Gly	Ser	Phe	Glu	Val	Arg	Ser	Ser	Arg	Pro	Ala	Trp	
		20				25					30				
Pro	Thr	Trp	Arg	Asn	Pro	Ile	Ser	Thr	Lys	Asn	Thr	Lys	Ile	Asn	Lys
		35				40					45				
Ala	Trp	Trp	Arg	Val	Pro	Val	Val	Pro	Ala	Thr	Arg	Glu	Ala	Glu	Ala
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Gly	Glu	Ser	Leu	Glu	Pro	Gly	Arg	Arg	Arg	Phe	Gln				
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<210> 6073

<211> 387

<212> DNA

<213> Homo sapiens

<400> 6073

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<210> 6074

<211> 69

<212> PRT

<213> Homo sapiens

<400> 6074

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Arg	Gly	Leu	Cys	Thr	Ala	Ser	Phe	Pro	Pro	His	Leu	Ser	Pro	Ala	Arg
		20					25				30				
Ala	Pro	Thr	Gly	Pro	Phe	Ser	Pro	Arg	Met	Lys	Pro	Ala	Gly	Ser	Val
		35				40				45					
Asn	Asp	Met	Ala	Leu	Asp	Ala	Phe	Asp	Leu	Asp	Arg	Met	Lys	Gln	Glu
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Ile	Leu	Glu	Glu	Val											
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<210> 6075

<211> 4668

<212> DNA

<213> Homo sapiens

<400> 6075

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 ctattacag catctggctg tactctaaca tatacaaata tgtttctggt tcaacatctc
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 660

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720
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<210> 6076

<211> 601

<212> PRT

<213> Homo sapiens

<400> 6076

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			20					25					30		
Glu	Val	Gly	Leu	Ala	Leu	Lys	Asp	Leu	Ala	Lys	Gln	Tyr	Ser	Asp	Arg
		35					40					45			
Leu	Glu	Cys	Cys	Glu	Asn	Glu	Val	Glu	Lys	Val	Ile	Glu	Glu	Ile	Arg
		50				55					60				
Cys	Lys	Ala	Ile	Glu	Arg	Gly	Thr	Gly	Asn	Asp	Asn	Tyr	Arg	Thr	Thr
65				70					75					80	
Gly	Ile	Ala	Thr	Ile	Glu	Val	Phe	Leu	Pro	Pro	Arg	Leu	Lys	Lys	Asp
			85					90					95		
Arg	Lys	Asn	Leu	Leu	Glu	Thr	Arg	Leu	His	Ile	Thr	Gly	Arg	Glu	Leu
		100						105				110			
Arg	Ser	Lys	Ile	Ala	Glu	Thr	Phe	Gly	Leu	Gln	Glu	Asn	Tyr	Ile	Lys
		115					120				125				
Ile	Val	Ile	Asn	Lys	Lys	Gln	Leu	Gln	Leu	Gly	Lys	Thr	Leu	Glu	Glu
		130				135				140					
Gln	Gly	Val	Ala	His	Asn	Val	Lys	Ala	Met	Val	Leu	Glu	Leu	Lys	Gln
145				150				155						160	
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5259

595

600

<210> 6077

<211> 2093

<212> DNA

<213> Homo sapiens

<400> 6077

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 1920
 aaaccagtga ctttatgggg ctgagctagt agggaaagccc ctggaaagat gctgcgttcc
 1980
 gaacctgtgc ctaatacacg caagggcgct gtcccgccca accccgcctt taaacgccac
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 2093

<210> 6078

<211> 213

<212> PRT

<213> Homo sapiens

<400> 6078

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			20					25					30		
Ser	Gly	Arg	Glu	Gly	Ala	Ser	Gly	Pro	Gly	Val	Gly	Pro	His	Ile	Tyr
			35				40					45			
Val	Arg	Glu	Ala	Glu	Asp	Arg	Glu	Leu	Val	Thr	Met	Ala	Gly	Pro	Gln
	50				55				60						
Pro	Leu	Ala	Leu	Gln	Leu	Glu	Gln	Leu	Leu	Asn	Pro	Arg	Pro	Ser	Glu
65				70					75					80	
Ala	Asp	Pro	Glu	Ala	Asp	Pro	Glu	Glu	Ala	Thr	Ala	Ala	Arg	Val	Ile
			85					90					95		
Asp	Arg	Phe	Asp	Glu	Gly	Glu	Asp	Gly	Glu	Gly	Asp	Phe	Leu	Val	Val
			100				105					110			
Gly	Ser	Ile	Arg	Lys	Leu	Ala	Ser	Ala	Ser	Leu	Leu	Asp	Thr	Asp	Lys
			115				120					125			
Arg	Tyr	Cys	Gly	Lys	Thr	Thr	Ser	Arg	Lys	Ala	Trp	Asn	Glu	Asp	His
	130						135				140				
Trp	Glu	Gln	Thr	Leu	Pro	Gly	Ser	Ser	Asp	Glu	Glu	Ile	Ser	Asp	Glu
145				150					155					160	
Glu	Gly	Ser	Gly	Asp	Glu	Asp	Ser	Glu	Gly	Leu	Gly	Leu	Glu	Glu	Tyr
			165					170				175			
Asp	Glu	Asp	Asp	Leu	Gly	Ala	Ala	Glu	Glu	Gln	Glu	Cys	Gly	Asp	Gln

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 Cys Pro Glu Tyr Gln
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<210> 6079

<211> 651

<212> DNA

<213> Homo sapiens

<400> 6079

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 240
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 300
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 360
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 420
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 480
 agaaacaaag ccaccagcc aatgaagtct gtactctggt ggcttcaggt ggaaaaggca
 540
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<210> 6080

<211> 162

<212> PRT

<213> Homo sapiens

<400> 6080

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 Gln Leu Gln Gly Gly Arg Phe Leu Met Gly Thr Asn Ser Pro Asp Ser
 35 40 45
 Arg Asp Gly Glu Gly Pro Val Arg Glu Ala Thr Val Lys Pro Phe Ala
 50 55 60
 Ile Asp Ile Phe Pro Val Thr Asn Lys Asp Phe Arg Asp Phe Val Arg
 65 70 75 80
 Glu Lys Lys Tyr Arg Thr Glu Ala Glu Met Phe Gly Trp Ser Phe Val
 85 90 95
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<212> DNA
<213> Homo sapiens
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<210> 6082
<211> 218
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<213> Homo sapiens
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5263

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Lys Leu Ala Gly Pro Ala Ser Ile Gly Leu Leu Ser Pro Gly Ile Leu
          100          105          110
Glu Tyr Leu Leu Gln Cys Leu Lys Leu Gln Ser His Pro Thr Val Met
          115          120          125
Leu Phe Ala Leu Ile Ala Leu Glu Lys Phe Ala Gln Thr Ser Glu Asn
          130          135          140
Lys Leu Thr Ile Ser Glu Ser Ser Ile Ser Asp Arg Leu Val Thr Leu
145          150          155          160
Glu Ser Trp Ala Asn Asp Pro Asp Tyr Leu Lys Arg Gln Val Gly Phe
          165          170          175
Cys Ala Gln Trp Ser Leu Asp Asn Leu Phe Leu Lys Glu Gly Arg Gln
          180          185          190
Leu Thr Tyr Glu Lys Val Asn Leu Ser Ser Ile Arg Ala Met Leu Asn
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Ser Asn Asp Val Ser Glu Tyr Leu Lys Ile
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<210> 6083

<211> 358

<212> DNA

<213> Homo sapiens

<400> 6083

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120
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180
gtagaagaaa caaagctttc aaaagaaaat cagacaagag caaaagaatc tgatttttca
240
gatactctga gtccaagcaa ggaaaaaagc agtgacgaca ctacagacgc ccaaattggat
300
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358

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<210> 6084

<211> 101

<212> PRT

<213> Homo sapiens

<400> 6084

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Ala Asp Asn Asp Phe Thr Asn Glu Arg Leu Thr Ala Leu Gln Glu Lys
          20          25          30
Leu Ile Val Glu Gly His Leu Thr Lys Ala Val Glu Glu Thr Lys Leu
          35          40          45
Ser Lys Glu Asn Gln Thr Arg Ala Lys Glu Ser Asp Phe Ser Asp Thr
          50          55          60
Leu Ser Pro Ser Lys Glu Lys Ser Ser Asp Asp Thr Thr Asp Ala Gln

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65		70		75		80									
Met	Asp	Glu	Gln	Asp	Leu	Asn	Glu	Pro	Leu	Ala	Lys	Val	Ser	Leu	Leu
			85					90						95	
Lys	Asp	Asp	Leu	Gln											
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<210> 6085

<211> 2307

<212> DNA

<213> Homo sapiens

<400> 6085

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240
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1260

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 2160
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<210> 6086

<211> 84

<212> PRT

<213> Homo sapiens

<400> 6086

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Arg	Gly	Ala	Ser	Leu	Cys	Val	Phe	Val	Cys	Val	Cys	Leu	Cys	Val	Arg
			20					25				30			
Ile	Thr	Leu	Gly	Val	Gln	Ala	Ser	Gly	Cys	Val	Cys	Val	Cys	Ala	Cys
		35				40					45				
Val	Cys	Val	Cys	Val	Ser	Val	Cys	Val	Cys	Val	Cys	Val	His	Thr	Gly
	50					55					60				
Gln	Pro	Pro	Tyr	Leu	Pro	Arg	Phe	Ser	Thr	Ala	Tyr	Leu	Phe	Gln	Trp
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<210> 6087
<211> 1506
<212> DNA
<213> Homo sapiens

<400> 6087
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<210> 6088

<211> 326

<212> PRT

<213> Homo sapiens

<400> 6088

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		20					25					30			
Pro	Gly	Asp	Leu	Leu	Ser	Ala	Arg	Leu	Leu	Ser	Gln	Glu	Lys	Arg	Ala
	35					40					45				
Ala	Glu	Thr	His	Phe	Gly	Phe	Glu	Thr	Val	Ser	Glu	Glu	Glu	Lys	Gly
	50				55					60					
Gly	Lys	Val	Tyr	Gln	Val	Phe	Glu	Ser	Val	Ala	Lys	Lys	Tyr	Asp	Val
65				70					75				80		
Met	Asn	Asp	Met	Met	Ser	Leu	Gly	Ile	His	Arg	Val	Trp	Lys	Asp	Leu
			85					90					95		
Leu	Leu	Trp	Lys	Met	His	Pro	Leu	Pro	Gly	Thr	Gln	Leu	Leu	Asp	Met
		100					105					110			
Ala	Gly	Gly	Thr	Gly	Asp	Ile	Ala	Phe	Arg	Phe	Leu	Asn	Tyr	Val	Gln
	115					120					125				
Ser	Gln	His	Gln	Arg	Lys	Gln	Lys	Arg	Gln	Leu	Arg	Ala	Gln	Gln	Asn
	130				135					140					
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			165					170					175		
Lys	Val	Gly	Lys	Gln	Lys	Ala	Leu	Ala	Gln	Gly	Tyr	Arg	Ala	Gly	Leu
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Ala	Trp	Val	Leu	Gly	Asp	Ala	Glu	Glu	Leu	Pro	Phe	Asp	Asp	Asp	Lys
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225				230						235				240	
Phe	Leu	Cys	Leu	Glu	Phe	Ser	Gln	Val	Asn	Asn	Pro	Leu	Ile	Ser	Arg
		245						250					255		
Leu	Tyr	Asp	Leu	Tyr	Ser	Phe	Gln	Val	Ile	Pro	Val	Leu	Gly	Glu	Val
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Ile	Ala	Gly	Asp	Trp	Lys	Ser	Tyr	Gln	Tyr	Leu	Val	Glu	Ser	Ile	Arg
	275					280						285			
Arg	Phe	Pro	Ser	Gln	Glu	Glu	Phe	Lys	Asp	Met	Ile	Glu	Asp	Ala	Gly
	290				295					300					
Phe	His	Lys	Val	Thr	Tyr	Glu	Ser	Leu	Thr	Ser	Gly	Ile	Val	Ala	Ile
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325

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<211> 4211

<212> DNA

<213> Homo sapiens

<400> 6089

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<211> 839

<212> PRT

<213> Homo sapiens

<400> 6090

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<210> 6091

<211> 1336

<212> DNA

<213> Homo sapiens

<400> 6091

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<211> 118

<212> PRT

<213> Homo sapiens

<400> 6092

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Val Thr Arg Gln Val Pro Ser Pro Pro Ser Gly Phe Arg Leu Pro Ser			
	50	55	60
Ser Arg His Glu Gly Pro Ser Pro Pro Arg Asp Leu Gly Thr Ser Gly			
65	70	75	80
Pro Ser Arg Ala Ala Ser His Lys Pro Ser Asn Glu Gln Arg Asp Ala			
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<211> 1998

<212> DNA

<213> Homo sapiens

<400> 6093

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<211> 136

<212> PRT

<213> Homo sapiens

<400> 6094

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<211> 441

<212> DNA

<213> Homo sapiens

<400> 6095

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<210> 6096

<211> 97

<212> PRT

<213> Homo sapiens

<400> 6096

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Lys	Lys	Trp	Asn	Ala	Val	Ala	Met	Trp	Ser	Trp	Asp	Val	Glu	Cys	Asp
		35				40					45				
Thr	Cys	Ala	Ile	Cys	Arg	Val	Gln	Val	Met	Val	Val	Trp	Gly	Glu	Cys
	50					55					60				
Asn	His	Ser	Phe	His	Asn	Cys	Cys	Met	Ser	Leu	Trp	Val	Lys	Gln	Asn
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<211> 2404

<212> DNA

<213> Homo sapiens

<400> 6097

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<211> 631

<212> PRT

<213> Homo sapiens

<400> 6098

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His	Gln	Ile	Pro	Ala	Tyr	Leu	Val	Xaa	Xaa	Gly	Pro	Cys	Ala	Xaa	Gly
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Glu	Glu	Xaa	Thr	Cys	Trp	Val	Val	Gly	Arg	Ser	Gly	Ala	Glu	Ala	Arg

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Pro Phe Ser Ala Leu Gly Trp Pro Gln Glu Thr Pro Asp Leu Ala Arg		
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Phe Tyr Pro Leu Ser Leu Leu Glu Thr Gly Ser Asp Leu Leu Leu Phe		
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Pro Phe Ser Lys Val Leu Leu His Pro Met Val Arg Asp Arg Gln Gly		
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Ile Ser Gly Val Glu Met Gln Leu Leu Gln Glu Lys Leu Arg Ser Gly		
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Asn Leu Asp Pro Ala Glu Leu Ala Ile Val Ala Ala Ala Gln Lys Lys		
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Thr Leu Cys Ser His Gly Val Gln Ala Gly Asp Leu His Leu Ser Val		
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Gly Leu Arg Leu Leu Ala Pro Leu Met Pro Phe Leu Ala Glu Glu Leu		
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Val Leu Leu Gln Ser Ser Glu Pro Gly Asp Gln Gly Leu Phe Glu Ala		
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Phe Leu Glu Pro Leu Gly Thr Leu Gly Tyr Cys Gly Ala Val Gly Leu		
515	520	525
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<210> 6099
<211> 3957
<212> DNA
<213> Homo sapiens
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<211> 1102

<212> PRT

<213> Homo sapiens

<400> 6100

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5284

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Pro Ser Pro Leu Val Thr Met Thr Pro Ala Val Pro Ala Val Thr Pro
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Val Asp Glu Glu Ser Ser Asp Gly Glu Pro Asp Gln Glu Ala Val Gln
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Ser Ser Thr Tyr Lys Asp Ser Asn Thr Leu His Leu Pro Thr Glu Arg
545          550          555          560
Phe Ser Pro Val Arg Arg Phe Ser Asp Gly Ala Ala Ser Ile Gln Ala
          565          570          575
Phe Lys Ala His Leu Glu Lys Met Gly Asn Asn Ser Ser Ile Lys Gln
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Leu Gln Gln Glu Cys Glu Gln Leu Gln Lys Met Tyr Gly Gly Gln Ile
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Pro Ala Leu Leu Thr His Gln Leu Gln Arg Leu Arg Ile Gln Pro Ser
          660          665          670
Ser Pro Pro Pro Asn His Pro Asn Asn His Leu Phe Arg Gln Pro Ser
          675          680          685
Asn Ser Pro Pro Pro Met Ser Ser Ala Met Ile Gln Pro His Gly Ala
          690          695          700
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705          710          715          720
Gln Gln Gln Pro Glu Asn Cys Ser Ser Pro Pro Asn Val Ala Leu Thr
          725          730          735
Cys Leu Gly Met Gln Gln Pro Ala Gln Ser Gln Gln Val Thr Ile Gln
          740          745          750
Val Gln Glu Pro Val Asp Met Leu Ser Asn Met Pro Gly Thr Ala Ala
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Gly Ser Ser Gly Arg Gly Ile Ser Ile Ser Pro Ser Ala Gly Gln Met
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Gln Met Gln His Arg Thr Asn Leu Met Ala Thr Leu Ser Tyr Gly His
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Arg Pro Leu Ser Lys Gln Leu Ser Ala Asp Ser Ala Glu Ala His Ser
          805          810          815
Leu Asn Val Asn Arg Phe Ser Pro Ala Asn Tyr Asp Gln Ala His Leu
          820          825          830
His Pro His Leu Phe Ser Asp Gln Ser Arg Gly Ser Pro Ser Ser Tyr
          835          840          845
Ser Pro Ser Thr Gly Val Gly Phe Ser Pro Thr Gln Ala Leu Lys Val
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Pro Pro Leu Asp Gln Phe Pro Thr Phe Pro Pro Ser Ala His Gln Gln
865          870          875          880
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Leu	Pro	Pro	Thr	Glu	Phe	Ala	Gln	Leu	Ile	Lys	Arg	Gln	Gln	Gln	Gln
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Phe	Arg	His	Met	Asn	Gln	Gly	Asp	Ala	Gly	Ser	Leu	Ala	Pro	Ser	Leu
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Gly	Gly	Gln	Ser	Met	Thr	Glu	Arg	Gln	Ala	Leu	Ser	Tyr	Gln	Asn	Ala
		980						985					990		
Asp	Ser	Tyr	His	His	Thr	Ile	Gln	Asn	Ser	Asp	Asp	Ala	Tyr	Val	Gln
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Ser	Gln	Gln	Phe	Gln	Asp	Gly	Glu	Asn	Glu	Glu	Cys	Gly	Ala	Ser	Leu
			1045					1050				1055			
Gly	Gly	His	Glu	His	Pro	Asp	Leu	Ser	Asp	Gly	Ser	Gln	His	Leu	Asn
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Ser	Ser	Cys	Tyr	Pro	Ser	Thr	Cys	Ile	Thr	Asp	Ile	Leu	Leu	Ser	Tyr
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<211> 1447

<212> DNA

<213> Homo sapiens

<400> 6101

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<211> 123

<212> PRT

<213> Homo sapiens

<400> 6102

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Leu	Ala	Met	Val	Ser	Gly	Asp	Gly	Phe	Leu	Val	Ser	Arg	Pro	Glu	Ala
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Ser	Arg	Arg	Val	Asp	Gly	Gly	Gly	Arg	Ser	Pro	Arg	Glu	Pro	Asp	Gly
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Arg	Gly	Arg	Ser	Arg	Gln	Ala	Arg	Phe	Ser	Pro	Tyr	Pro	Ile	Pro	Ala
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<210> 6103

<211> 309

<212> DNA

<213> Homo sapiens

<400> 6103

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<210> 6104

<211> 71

<212> PRT

<213> Homo sapiens

<400> 6104

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			20					25					30		
Leu	Asn	Arg	Leu	Gln	Tyr	Ala	Val	Ile	Ser	Glu	Ala	Trp	Arg	Leu	Val
		35					40					45			
Glu	Glu	Glu	Ile	Val	Ser	Pro	Ser	Asp	Leu	Asp	Leu	Val	Met	Ser	Asp
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<210> 6105

<211> 1846

<212> DNA

<213> Homo sapiens

<400> 6105

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<210> 6106

<211> 405

<212> PRT

<213> Homo sapiens

<400> 6106

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Asn Ser Thr Gln Pro Ser Thr Ala Gly Met Lys Trp Cys Leu Pro Phe
      35           40           45
His Leu Leu Cys Arg Gly Pro Ser Gly Ser Leu Ser Ala Pro Pro Ala
      50           55           60
Ala Ser Val Ile Ser Ala Pro Pro Ser Ser Ser Ser Arg His Arg Lys
      65           70           75           80
Arg Arg Arg Thr Ser Ser Lys Ser Glu Ala Gly Ala Arg Gly Gly Gly
      85           90           95
Gln Gly Ser Lys Glu Lys Gly Arg Gly Ser Trp Gly Gly Arg His His
      100           105           110
His His His Pro Leu Pro Ala Ala Gly Phe Lys Lys Gln Gln Arg Lys
      115           120           125
Phe Gln Tyr Gly Asn Tyr Cys Lys Tyr Tyr Gly Tyr Arg Asn Pro Ser
      130           135           140
Cys Glu Asp Gly Arg Leu Arg Val Leu Lys Pro Glu Trp Phe Arg Gly
      145           150           155           160
Arg Asp Val Leu Asp Leu Gly Cys Asn Val Gly His Leu Thr Leu Ser
      165           170           175
Ile Ala Cys Lys Trp Gly Pro Ser Arg Met Val Gly Leu Asp Ile Asp
      180           185           190
Ser Arg Leu Ile His Ser Ala Arg Gln Asn Ile Arg His Tyr Leu Ser
      195           200           205
Glu Glu Leu Arg Leu Pro Pro Gln Thr Leu Glu Gly Asp Pro Gly Ala
      210           215           220
Glu Gly Glu Glu Gly Thr Thr Thr Val Arg Lys Arg Ser Cys Phe Pro
      225           230           235           240
Ala Ser Leu Thr Ala Ser Arg Gly Pro Ile Ala Ala Pro Gln Val Pro
      245           250           255
Leu Asp Gly Ala Asp Thr Ser Val Phe Pro Asn Asn Val Val Phe Val
      260           265           270
Thr Gly Asn Tyr Val Leu Asp Arg Asp Asp Leu Val Glu Ala Gln Thr
      275           280           285
Pro Glu Tyr Asp Val Val Leu Cys Leu Ser Leu Thr Lys Trp Val His
      290           295           300
Leu Asn Trp Gly Asp Glu Gly Leu Lys Arg Met Phe Arg Arg Ile Tyr
      305           310           315           320
Arg His Leu Arg Pro Gly Gly Ile Leu Val Leu Glu Pro Gln Pro Trp
      325           330           335
Ser Ser Tyr Gly Lys Arg Lys Thr Leu Thr Glu Thr Ile Tyr Lys Asn
      340           345           350
Tyr Tyr Arg Ile Gln Leu Lys Pro Glu Gln Phe Ser Ser Tyr Leu Thr
      355           360           365
Ser Pro Asp Val Gly Phe Ser Ser Tyr Glu Leu Val Ala Thr Pro His
      370           375           380
Asn Thr Ser Lys Gly Phe Gln Arg Pro Val Tyr Leu Phe His Lys Ala
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Arg Ser Pro Ser His
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<210> 6107

<211> 896

<212> DNA

<213> Homo sapiens

<400> 6107

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 720
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<210> 6108

<211> 124

<212> PRT

<213> Homo sapiens

<400> 6108

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 20 25 30
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 35 40 45
 Leu Gly Ser Thr Pro Pro Pro Ala Pro Ala Ser Pro Val Glu Ser Pro
 50 55 60
 Arg Pro Ser Pro Ala Ser Ser Ala Phe Ser Ser Leu Pro Ser Asp Gly
 65 70 75 80
 Trp Gly Ser Ser Val Gly Ser Gly Leu Pro Trp Pro Ala Thr Arg Trp

	85		90		95										
Ser	Thr	Cys	Pro	Arg	Trp	Arg	Thr	Asp	Val	Ser	Pro	Ala	Asp	Thr	Ile
		100				105							110		
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<210> 6109

<211> 2087

<212> DNA

<213> Homo sapiens

<400> 6109

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1260

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<210> 6110

<211> 323

<212> PRT

<213> Homo sapiens

<400> 6110

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			20					25					30		
Pro	Gly	Ala	Ala	Ala	Gly	Leu	Thr	Leu	Leu	Cys	Ser	Leu	Val	Pro	Ile
			35					40					45		
Cys	Val	Leu	Arg	Arg	Pro	Gly	Ala	Asn	His	Glu	Gly	Ser	Ala	Ser	Arg
			50				55				60				
Gln	Lys	Ala	Leu	Ser	Leu	Val	Ser	Cys	Phe	Ala	Gly	Gly	Val	Phe	Leu
65					70					75				80	
Ala	Thr	Cys	Leu	Leu	Asp	Leu	Leu	Pro	Asp	Tyr	Leu	Ala	Ala	Ile	Asp
			85					90						95	
Glu	Ala	Leu	Ala	Ala	Leu	His	Val	Thr	Leu	Gln	Phe	Pro	Leu	Gln	Glu
			100					105					110		
Phe	Ile	Leu	Ala	Met	Gly	Phe	Phe	Leu	Val	Leu	Val	Met	Glu	Gln	Ile
			115				120					125			
Thr	Leu	Ala	Tyr	Lys	Glu	Gln	Ser	Gly	Pro	Ser	Pro	Leu	Glu	Glu	Thr
			130				135					140			
Arg	Ala	Leu	Leu	Gly	Thr	Val	Asn	Gly	Gly	Pro	Gln	His	Trp	His	Asp

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 Leu Arg Ala Cys Val Leu Val Phe Ser Leu Ala Leu His Ser Val Phe
 180 185 190
 Glu Gly Leu Ala Val Gly Leu Gln Arg Asp Arg Ala Arg Ala Met Glu
 195 200 205
 Leu Cys Leu Ala Leu Leu Leu His Lys Gly Ile Leu Ala Val Ser Leu
 210 215 220
 Ser Leu Arg Leu Leu Gln Ser His Leu Arg Ala Gln Val Val Ala Gly
 225 230 235 240
 Cys Gly Ile Leu Phe Ser Cys Met Thr Pro Leu Gly Ile Gly Leu Gly
 245 250 255
 Ala Ala Leu Ala Glu Ser Ala Gly Pro Leu His Gln Leu Ala Gln Ser
 260 265 270
 Val Leu Glu Gly Met Ala Ala Gly Thr Phe Leu Tyr Ile Thr Phe Leu
 275 280 285
 Glu Ile Leu Pro Gln Glu Leu Ala Ser Ser Glu Gln Arg Ile Leu Lys
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<210> 6111

<211> 1706

<212> DNA

<213> Homo sapiens

<400> 6111

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 180
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<210> 6112

<211> 110

<212> PRT

<213> Homo sapiens

<400> 6112

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		20						25					30		
Pro	Leu	Pro	Gly	Phe	Lys	Gln	Phe	Ser	Cys	Arg	Ser	Leu	Pro	Ser	Ser
		35				40						45			
Trp	Asp	Tyr	Arg	His	Ala	Pro	Pro	Arg	Gln	Ala	Asn	Phe	Cys	Ile	Phe
	50					55					60				
Ser	Arg	Asp	Gly	Val	Ser	Pro	Cys	Trp	Pro	Gly	Trp	Ser	Gln	Thr	Pro
65				70					75					80	
Asp	Leu	Arg	Arg	Ser	Thr	His	Leu	Ser	Val	Pro	Lys	Cys	Trp	Asp	Tyr
			85					90					95		
Arg	Arg	Glu	Pro	Pro	His	Leu	Ala	Tyr	Glu	Trp	Ser	Phe	Asn		

100

105

110

<210> 6113

<211> 1095

<212> DNA

<213> Homo sapiens

<400> 6113

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<210> 6114

<211> 87

<212> PRT

<213> Homo sapiens

<400> 6114

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		20					25					30			
Leu	Arg	Lys	Glu	Ala	Lys	Lys	Arg	Gly	His	Lys	Lys	Pro	Arg	Lys	Asp
		35					40					45			
Pro	Gly	Val	Pro	Asn	Ser	Ala	Pro	Phe	Lys	Glu	Ala	Leu	Leu	Glu	Glu
		50				55					60				
Ala	Glu	Leu	Arg	Lys	Gln	Arg	Leu	Glu	Glu	Leu	Lys	Gln	Gln	Gln	Lys
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Leu	Asp	Arg	Gln	Lys	Glu	Leu									
					85										

<210> 6115

<211> 411

<212> DNA

<213> Homo sapiens

<400> 6115

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<210> 6116

<211> 129

<212> PRT

<213> Homo sapiens

<400> 6116

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Leu	Pro	Ile	Ser	Ser	Leu	Glu	Thr	Arg	His	Ala	Gln	Asn	Pro	Gly	Gly
			20					25					30		
Gln	Val	Lys	Thr	Pro	Thr	Leu	Gln	Val	Arg	Gly	Ala	Ser	Ala	Leu	Ala
		35					40					45			
Pro	Gln	Phe	Pro	Gln	Arg	Asn	Arg	Leu	Leu	Ala	Ser	Arg	Val	Gly	Tyr
		50				55				60					
Arg	Val	Ser	Val	Leu	His	Gly	Ile	Tyr	Glu	Asp	Val	Pro	Pro	Lys	Leu
65					70					75				80	
Leu	Pro	Pro	Pro	Pro	Trp	Asp	Ala	Thr	Val	Arg	Pro	Ala	Asp	Glu	Phe
				85					90					95	
Leu	Pro	Gln	Arg	Pro	Arg	Glu	Gly	Gly	Leu	Arg	Ala	Ala	Ala	Ala	Ala
		100					105						110		
Thr	Gly	Gly	Glu	Ala	Ser	Ala	Gly	Asn	Leu	Gly	Pro	Gly	Gly	Ala	Arg

115 120 125

Arg

<210> 6117
<211> 962
<212> DNA
<213> Homo sapiens

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180
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720
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960
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962

<210> 6118
<211> 113
<212> PRT
<213> Homo sapiens

<400> 6118
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<400> 6120																
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1				5					10					15		
Thr	Pro	His	Gly	Leu	His	Gly	Asn	Ile	Thr	Val	Thr	Ile	Ser	Gln	Ser	
			20					25					30			
Gln	Arg	Gly	Pro	Thr	Glu	Leu	Met	Pro	Ala	Cys	Phe	Lys	Pro	Thr	Asn	
		35					40					45				
Glu	Asn	Ser	Pro	Trp	Glu	Thr	Cys	Leu	Asp	Asn	Thr	Leu	Asp	Pro	Asn	
	50					55					60					
Lys	Cys	Phe	Asn	Pro	Thr	Ser	Pro	Leu	Ser	Leu	Pro	Leu	Ser	Cys	Pro	
65					70				75					80		
Tyr	Pro	Leu	Val	Glu	His	Val	Cys	Pro	Lys	Arg	Pro	Cys	Lys	Val	Cys	
				85					90					95		
Cys	Pro	Val	Leu	Ser	Gly	Leu	Cys	Gln	Gly	Ile	Lys	Leu	Leu	Leu	Leu	

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Cys Asp Val Ser Cys Cys
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105

110

<210> 6121

<211> 1039

<212> DNA

<213> Homo sapiens

<400> 6121

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120

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ctgatctctt gcacaccaa tcattaaggg gccataaaga ctgctttgaa aaataccatt
240

taattgcaaa ccagggttgt cctcgatcta agctttcaaa aagtacttat gaagaagtta
300

aaaccatttt gagtaagaag ataaactgga ttgtgcagta tgcacaaaat aaggatctgg
360

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420

cagaagaaaa attactccca cagtttgagt cccaagtacc aaaatattct gcaaaatgga
480

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600

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660

aggctaagt ccagaccag catccacatt acagcagaga ggaataagtt tttgaagagt
720

taactacca agtgcaagaa aaagattctt tggcctcaca gctccatgtc cgccacgttg
780

ccatcgaaca gttctgaag aactgttcta agttaccatg tctgcaagta gggcgaacag
840

gaatgaagtc gcacctacc ataaacaact gacctaaaca gacttacttc gtatgcctg
900

ccctttattg gtctccaga catgcaaact ttgaagaagt ttgaagaaag ttgtggtccg
960

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1039

<210> 6122

<211> 221

<212> PRT

<213> Homo sapiens

<400> 6122

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Cys His Ile Cys Phe Glu Leu Asn Ile Glu Gly Val Pro Lys Ser Asp			
35	40	45	
Leu Leu His Thr Lys Ser Leu Arg Gly His Lys Asp Cys Phe Glu Lys			
50	55	60	
Tyr His Leu Ile Ala Asn Gln Gly Cys Pro Arg Ser Lys Leu Ser Lys			
65	70	75	80
Ser Thr Tyr Glu Glu Val Lys Thr Ile Leu Ser Lys Lys Ile Asn Trp			
85	90	95	
Ile Val Gln Tyr Ala Gln Asn Lys Asp Leu Asp Ser Asp Ser Glu Cys			
100	105	110	
Ser Lys Lys Pro Gln His His Leu Phe Asn Phe Arg His Lys Pro Glu			
115	120	125	
Glu Lys Leu Leu Pro Gln Phe Glu Ser Gln Val Pro Lys Tyr Ser Ala			
130	135	140	
Lys Trp Ile Asp Gly Ser Ala Gly Gly Ile Ser Asn Cys Thr Gln Arg			
145	150	155	160
Ile Leu Glu Gln Arg Glu Asn Thr Asp Phe Gly Leu Ser Met Leu Gln			
165	170	175	
Asp Ser Gly Ala Thr Leu Cys Arg Asn Ser Val Leu Trp Pro His Ser			
180	185	190	
His Asn Gln Ala Gln Lys Lys Glu Glu Thr Ile Ser Ser Pro Glu Ala			
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Asn Val Gln Thr Gln His Pro His Tyr Ser Arg Glu Glu			
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<210> 6123

<211> 900

<212> DNA

<213> Homo sapiens

<400> 6123

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<210> 6124

<211> 300

<212> PRT

<213> Homo sapiens

<400> 6124

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		20					25					30			
Cys	Thr	Pro	Ala	Trp	Ala	Thr	Arg	Ala	Lys	Gln	Gln	Glu	Lys	Lys	Lys
		35				40						45			
Glu	Ala	Ala	Leu	Cys	Pro	Lys	Pro	Thr	Ser	Arg	Ser	Pro	Asn	Leu	Gly
	50					55					60				
Pro	Leu	Gly	Leu	Phe	Ser	Leu	Ser	Val	Pro	Asn	Leu	Leu	Leu	Ala	Gly
65					70					75				80	
Asn	Lys	Pro	Pro	Gly	Leu	Leu	Pro	Arg	Lys	Gly	Leu	Tyr	Met	Ala	Asn
			85						90					95	
Asp	Leu	Lys	Leu	Leu	Arg	His	His	Leu	Gln	Ile	Pro	Ile	His	Phe	Pro
		100						105					110		
Lys	Asp	Phe	Leu	Ser	Val	Met	Leu	Glu	Lys	Gly	Ser	Leu	Ser	Ala	Met
		115					120					125			
Arg	Phe	Leu	Thr	Ala	Val	Asn	Leu	Glu	His	Pro	Glu	Met	Leu	Glu	Lys
	130					135					140				
Ala	Ser	Arg	Glu	Leu	Trp	Met	Arg	Val	Trp	Ser	Arg	Val	Ser	Val	Gly
145					150					155					160
Leu	Trp	Glu	Ser	Ser	Gly	Arg	Thr	Leu	Asp	Asp	Phe	Leu	Thr	Phe	Pro
			165					170					175		
Arg	His	Val	Phe	Arg	Val	Met	Ile	Leu	Pro	Pro	Pro	Gly	Gly	Ser	Thr
		180						185					190		
Val	Leu	Pro	Val	Thr	Pro	Leu	Ser	Pro	His	Arg	Leu	Pro	Ala	Val	Phe
		195					200					205			
Ser	Ser	Ser	Gln	Asn	Glu	Asp	Ile	Thr	Glu	Pro	Gln	Ser	Ile	Leu	Ala
	210					215					220				
Ala	Ala	Glu	Lys	Ala	Gly	Met	Ser	Ala	Glu	Gln	Ala	Gln	Gly	Leu	Leu
225					230					235				240	
Glu	Lys	Ile	Ala	Thr	Pro	Lys	Val	Lys	Asn	Gln	Leu	Lys	Glu	Thr	Thr
			245					250					255		
Glu	Ala	Ala	Cys	Arg	Tyr	Gly	Ala	Phe	Gly	Leu	Pro	Ile	Thr	Val	Ala
		260						265					270		
His	Val	Asp	Gly	Gln	Thr	His	Met	Leu	Phe	Gly	Ser	Asp	Arg	Met	Glu
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290

295

300

<210> 6125

<211> 468

<212> DNA

<213> Homo sapiens

<400> 6125

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<210> 6126

<211> 156

<212> PRT

<213> Homo sapiens

<400> 6126

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Asp	Lys	Lys	Lys	Met	Lys	Gln	Asp	Leu	Glu	Asp	Ala	Ser	Asn	Lys	Ala
			20					25					30		
Glu	Glu	Glu	Arg	Ala	Arg	Leu	Glu	Gly	Glu	Leu	Lys	Gly	Leu	Gln	Glu
		35				40					45				
Gln	Ile	Ala	Glu	Thr	Lys	Ala	Arg	Leu	Ile	Thr	Gln	Gln	His	Asp	Arg
	50					55					60				
Ala	Gln	Glu	Gln	Ser	Asp	His	Ala	Leu	Met	Leu	Arg	Glu	Leu	Gln	Lys
65					70					75				80	
Leu	Leu	Gln	Glu	Glu	Arg	Thr	Gln	Arg	Gln	Asp	Leu	Glu	Leu	Arg	Leu
			85					90					95		
Glu	Glu	Thr	Arg	Glu	Ala	Leu	Ala	Gly	Arg	Ala	Tyr	Ala	Ala	Glu	Gln
		100						105					110		
Met	Glu	Gly	Phe	Glu	Leu	Gln	Thr	Lys	Gln	Leu	Thr	Arg	Glu	Val	Glu
	115					120						125			
Glu	Leu	Lys	Ser	Glu	Leu	Gln	Ala	Ile	Arg	Asp	Glu	Lys	Asn	Gln	Pro
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Asp	Pro	Arg	Leu	Gln	Glu	Leu	Gln	Glu	Glu	Ala	Ala				
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<210> 6127

<211> 1900

<212> DNA

<213> Homo sapiens

<400> 6127

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240
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300
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360
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420
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600
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720
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<210> 6128

<211> 530

<212> PRT

<213> Homo sapiens

<400> 6128

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		20					25					30			
Ala	Ser	Leu	Ala	Asp	Arg	Ala	Ser	Arg	Ala	Arg	Asp	Ser	Asn	Met	Val
		35					40					45			
Arg	Ala	Ala	Ala	Glu	Leu	Ala	Leu	Ser	Cys	Leu	Pro	His	Ala	His	Ala
		50				55				60					
Leu	Asn	Pro	Asn	Glu	Ile	Gln	Arg	Ala	Leu	Val	Gln	Cys	Lys	Glu	Gln
65				70					75					80	
Asp	Asn	Leu	Met	Leu	Glu	Lys	Ala	Cys	Met	Ala	Val	Glu	Glu	Ala	Ala
			85					90					95		
Lys	Gly	Gly	Gly	Val	Tyr	Pro	Glu	Val	Leu	Phe	Glu	Val	Ala	His	Gln
			100					105					110		
Trp	Phe	Trp	Leu	Tyr	Glu	Gln	Thr	Ala	Gly	Gly	Ser	Ser	Thr	Ala	Arg
		115					120					125			
Glu	Gly	Ala	Thr	Ser	Cys	Ser	Ala	Ser	Gly	Ile	Arg	Ala	Gly	Gly	Glu
		130				135					140				
Ala	Gly	Arg	Gly	Met	Pro	Glu	Gly	Arg	Gly	Gly	Pro	Gly	Thr	Glu	Pro
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Val	Thr	Val	Ala	Ala	Ala	Ala	Val	Thr	Ala	Ala	Ala	Thr	Val	Val	Pro
			165					170					175		
Val	Ile	Ser	Val	Gly	Ser	Ser	Leu	Tyr	Pro	Gly	Pro	Gly	Leu	Gly	His
			180					185					190		
Gly	His	Ser	Pro	Gly	Leu	His	Pro	Tyr	Thr	Ala	Leu	Gln	Pro	His	Leu
		195					200					205			
Pro	Cys	Ser	Pro	Gln	Tyr	Leu	Thr	His	Pro	Ala	His	Pro	Ala	His	Pro
		210				215					220				
Met	Pro	His	Met	Pro	Arg	Pro	Ala	Val	Phe	Pro	Val	Pro	Ser	Ser	Ala
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Tyr	Pro	Gln	Gly	Val	His	Pro	Ala	Phe	Leu	Gly	Ala	Gln	Tyr	Pro	Tyr
			245					250					255		
Ser	Val	Thr	Pro	Pro	Ser	Leu	Ala	Ala	Thr	Ala	Val	Ser	Phe	Pro	Val

Pro	Ser	Met	Ala	Pro	Ile	Thr	Val	His	Pro	Tyr	His	Thr	Glu	Pro	Gly
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Val	Ser	Ser	Val	His	Pro	Ala	Ser	Thr	Phe	Pro	Ala	Ile	Gln	Gly	Ala
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Ser	Leu	Pro	Ala	Leu	Thr	Thr	Gln	Pro	Ser	Pro	Leu	Val	Ser	Gly	Gly
			325						330					335	
Phe	Pro	Pro	Pro	Glu	Glu	Glu	Thr	His	Ser	Gln	Pro	Val	Asn	Pro	His
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Ser	Leu	His	His	Leu	His	Ala	Ala	Tyr	Arg	Val	Gly	Met	Leu	Ala	Leu
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Leu	Gln	Arg	Leu	Ser	Pro	Ala	His	Ala	His	Asn	His	Leu	Arg	Ala	Pro
		435				440						445			
Ala	Phe	His	Gln	Leu	Val	Gln	Arg	Cys	Gln	Gln	Ala	Tyr	Met	Gln	Tyr
		450				455					460				
Ile	His	His	Arg	Leu	Ile	His	Leu	Thr	Pro	Ala	Asp	Tyr	Asp	Asp	Phe
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Val	Asn	Ala	Ile	Arg	Ser	Ala	Arg	Ser	Ala	Phe	Cys	Leu	Thr	Pro	Met
			485					490						495	
Gly	Met	Met	Gln	Phe	Asn	Asp	Ile	Leu	Gln	Asn	Leu	Lys	Arg	Ser	Lys
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Gln	Thr	Lys	Glu	Leu	Trp	Gln	Arg	Val	Ser	Leu	Glu	Met	Ala	Thr	Phe
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<210> 6129

<211> 2012

<212> DNA

<213> Homo sapiens

<400> 6129

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2012

<210> 6130

<211> 364

<212> PRT

<213> Homo sapiens

<400> 6130

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Val Arg His Cys Phe Phe Thr Val Ile Phe Ala Ile Phe Ser Ala Ile
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<210> 6131

<211> 3526

<212> DNA

<213> Homo sapiens

<400> 6131

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<211> 167

<212> PRT

<213> Homo sapiens

<400> 6132

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<211> 4156

<212> DNA

<213> Homo sapiens

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<211> 595

<212> PRT

<213> Homo sapiens

<400> 6134

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Pro	Asp	Val	Gly	Gly	Gly	Trp	Leu	Glu	Gly	Arg	Asn	Ile	Lys	Gly	Glu
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385	390	395
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465	470	475
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515	520	525
Ile Thr Leu Gln Asp Lys Gln Asn Met Val Lys Arg Val Ser Ile Met		
530	535	540
Ser Tyr Ala Leu Gln Ala Glu Met Asn His Phe His Ser Asn Arg Ile		

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 <213> Homo sapiens

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<400> 6136
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 35 40 45
 Leu Leu Ser Leu Glu His Val Gly Ile Leu His Lys Asp Phe Glu Ser
 50 55 60
 Ile Leu Pro Thr Arg Lys Asn His Asn Met Ala Ser Arg Pro Leu Thr
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<211> 550

<212> PRT

<213> Homo sapiens

<400> 6138

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<211> 2249

<212> DNA

<213> Homo sapiens

<400> 6139

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<211> 381

<212> PRT

<213> Homo sapiens

<400> 6140

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<211> 5651

<212> DNA

<213> Homo sapiens

<400> 6141

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<210> 6142

<211> 513

<212> PRT

<213> Homo sapiens

<400> 6142

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Val	His	Val	His	Pro	Arg	Ala	Ala	Gly	Leu	Val	Gly	Arg	Asp	Gly	Pro
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420	425	430
Pro Lys Gly Tyr Ala Ala Asn Tyr Cys Asp Gly Glu Cys Ser Phe Pro		
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Leu Asn Ala His Met Asn Ala Thr Asn His Ala Ile Val Gln Thr Leu		
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Val His Leu Met Asn Pro Glu Tyr Val Pro Lys Pro Cys Cys Ala Pro		
465	470	475
Thr Lys Leu Asn Ala Ile Ser Val Leu Tyr Phe Asn Asp Asn Ser Lys		
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<210> 6143

<211> 1137

<212> DNA

<213> Homo sapiens

<400> 6143

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<210> 6144

<211> 141

<212> PRT

<213> Homo sapiens

<400> 6144

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			20					25					30		
Ser	Gly	Ser	Arg	Gln	Ala	Trp	Val	His	Pro	Pro	Ala	Gln	Pro	Arg	Thr
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Ala	Gly	Pro	Glu	Leu	Gly	Gly	Gln	Gly	Ile	Pro	Ser	Pro	Gly	Cys	Ala
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Cys	Gln	Arg	Gly	Glu	Ala	Gly	Gly	Gly	Gly	Asn	Ala	Val	Leu	Pro	Gln
65				70					75					80	
Glu	Ser	Val	Leu	Arg	Ala	Ser	Ala	Val	Gly	Arg	Gly	Ala	Glu	Gly	Pro
				85					90				95		
Gly	Ala	Leu	Thr	Arg	Ser	Gly	Ser	Gly	Ala	Ala	Ser	Ala	Leu	Val	Arg
			100					105					110		
Pro	Gly	Glu	Lys	Gly	Cys	Trp	Cys	Arg	Thr	Ala	Ser	Gly	Ala	Gly	Pro
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<210> 6145

<211> 766

<212> DNA

<213> Homo sapiens

<400> 6145

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<210> 6146

<211> 100

<212> PRT

<213> Homo sapiens

<400> 6146

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			20				25					30			
Ala	Val	Pro	Thr	Pro	Glu	Ala	Gln	Gln	Gln	Gln	Val	Lys	Gln	Pro	Cys
		35				40					45				
Gln	Pro	Pro	Pro	Val	Lys	Cys	Gln	Glu	Thr	Cys	Ala	Pro	Lys	Thr	Lys
	50				55				60						
Asp	Pro	Cys	Ala	Pro	Gln	Val	Lys	Lys	Gln	Cys	Pro	Pro	Lys	Asp	Thr
65				70					75					80	
Ile	Ile	Pro	Ala	Gln	Gln	Lys	Cys	Pro	Ser	Ala	Gln	Gln	Ala	Ser	Lys
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<210> 6147

<211> 1852

<212> DNA

<213> Homo sapiens

<400> 6147

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<210> 6148

<211> 410

<212> PRT

<213> Homo sapiens

<400> 6148

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      35          40          45
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      50          55          60
Phe Asn Leu Asp Ile Arg Arg Ala Ile Gln Ile Leu Asn Glu Gly Ala
      65          70          75          80
Ser Ser Glu Lys Gly Asp Leu Asn Leu Asn Val Val Ala Met Ala Leu
      85          90          95
Ser Gly Tyr Thr Asp Glu Lys Asn Ser Leu Trp Arg Glu Met Cys Ser
      100          105          110
Thr Leu Arg Leu Gln Leu Asn Asn Pro Tyr Leu Cys Val Met Phe Ala
      115          120          125
Phe Leu Thr Ser Glu Thr Gly Ser Tyr Asp Gly Val Leu Tyr Glu Asn
      130          135          140
Lys Val Ala Val Arg Asp Arg Val Ala Phe Ala Cys Lys Phe Leu Ser
      145          150          155          160
Asp Thr Gln Leu Asn Arg Tyr Ile Glu Lys Leu Thr Asn Glu Met Lys
      165          170          175
Glu Ala Gly Asn Leu Glu Gly Ile Leu Leu Thr Gly Leu Thr Lys Asp
      180          185          190
Gly Val Asp Leu Met Glu Ser Tyr Val Asp Arg Thr Gly Asp Val Gln
      195          200          205
Thr Ala Ser Tyr Cys Met Leu Gln Gly Ser Pro Leu Asp Val Leu Lys
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Asp Glu Arg Val Gln Tyr Trp Ile Glu Asn Tyr Arg Asn Leu Leu Asp
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Ala Trp Arg Phe Trp His Lys Arg Ala Glu Phe Asp Ile His Arg Ser
      245          250          255
Lys Leu Asp Pro Ser Ser Lys Pro Leu Ala Gln Val Phe Val Ser Cys
      260          265          270
Asn Phe Cys Gly Lys Ser Ile Ser Tyr Ser Cys Ser Ala Val Pro His
      275          280          285
Gln Gly Arg Gly Phe Ser Gln Tyr Gly Val Ser Gly Ser Pro Thr Lys
      290          295          300
Ser Lys Val Thr Ser Cys Pro Gly Cys Arg Lys Pro Leu Pro Arg Cys
      305          310          315          320
Ala Leu Cys Leu Ile Asn Met Gly Thr Pro Val Ser Ser Cys Pro Gly
      325          330          335
Gly Thr Lys Ser Asp Glu Lys Val Asp Leu Ser Lys Asp Lys Lys Leu
      340          345          350
Ala Gln Phe Asn Asn Trp Phe Thr Trp Cys His Asn Cys Arg His Gly
      355          360          365
Gly His Ala Gly His Met Leu Ser Trp Phe Arg Asp His Ala Glu Cys
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<210> 6149
<211> 1949
<212> DNA
<213> Homo sapiens

<400> 6149
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<210> 6150

<211> 508

<212> PRT

<213> Homo sapiens

<400> 6150

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Glu	Arg	Lys	Arg	Ile	Lys	Lys	Glu	Pro	Val	Thr	Arg	Lys	Ala	Gly	Leu
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Ile	Arg	Gly	Asp	Ala	Arg	Arg	Ile	Lys	Glu	Leu	Ile	Ser	Glu	Gly	Ala
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Asp	Val	Asn	Val	Lys	Asp	Phe	Ala	Gly	Trp	Thr	Ala	Leu	His	Glu	Ala

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Cys Asn Arg Gly Tyr Tyr Asp Val Ala Lys Gln Leu Leu Ala Ala Gly		
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Ala Glu Val Asn Thr Lys Gly Leu Asp Asp Asp Thr Pro Leu His Asp		
225	230	235
Ala Ala Asn Asn Gly His Tyr Lys Val Val Lys Leu Leu Leu Arg Tyr		240
245	250	255
Gly Gly Asn Pro Gln Gln Ser Asn Arg Lys Gly Glu Thr Pro Leu Lys		
260	265	270
Val Ala Asn Ser Pro Thr Met Val Asn Leu Leu Leu Gly Lys Gly Thr		
275	280	285
Tyr Thr Ser Ser Glu Glu Ser Ser Thr Glu Ser Ser Glu Glu Glu Asp		
290	295	300
Ala Pro Ser Phe Ala Pro Ser Ser Ser Val Asp Gly Asn Asn Thr Asp		
305	310	315
Ser Glu Phe Glu Lys Gly Leu Lys His Lys Ala Lys Asn Pro Glu Pro		
325	330	335
Gln Lys Ala Thr Ala Pro Val Lys Asp Glu Tyr Glu Phe Asp Glu Asp		
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Asp Glu Gln Asp Arg Val Pro Pro Val Asp Asp Lys His Leu Leu Lys		
355	360	365
Lys Asp Tyr Arg Lys Glu Thr Lys Ser Asn Ser Phe Ile Ser Ile Pro		
370	375	380
Lys Met Glu Val Lys Ser Tyr Thr Lys Asn Asn Thr Ile Ala Pro Lys		
385	390	395
Lys Ala Ser His Arg Ile Leu Ser Asp Thr Ser Asp Glu Glu Asp Ala		
405	410	415
Ser Val Thr Val Gly Thr Gly Glu Lys Leu Arg Leu Ser Ala His Thr		
420	425	430
Ile Leu Pro Gly Ser Lys Thr Arg Glu Pro Ser Asn Ala Lys Gln Gln		
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Lys Glu Lys Asn Lys Val Lys Lys Lys Arg Lys Lys Glu Thr Lys Gly		
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Arg Glu Val Arg Phe Gly Lys Arg Ser Xaa Ser Ser Ala Pro Arg Ser		
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<210> 6151

<211> 648

<212> DNA

<213> Homo sapiens

<400> 6151

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<210> 6152
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 Ala Gly Thr Val Asp Thr His Leu Pro Ser Leu Leu Pro Val Ile
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 Leu His Pro Leu Gly Ala Ala Ser Ala Gly Arg Ala Leu Glu Pro Lys
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 Ala Asp Pro His Thr Cys Pro Tyr Gly Arg Lys Glu Ser Arg Gly Glu
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 <212> DNA
 <213> Homo sapiens

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<210> 6154

<211> 388

<212> PRT

<213> Homo sapiens

<400> 6154

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      35              40              45
Asn Phe Ser Pro Ser Gly His Leu Leu Ala Ser Gly Ser Arg Asp Lys
      50              55              60
Thr Val Arg Ile Trp Val Pro Asn Val Lys Gly Glu Ser Thr Val Phe
      65              70              75              80
Arg Ala His Thr Ala Thr Val Arg Ser Val His Phe Cys Ser Asp Gly
      85              90              95
Gln Ser Phe Val Thr Ala Ser Asp Asp Lys Thr Val Lys Val Trp Ala
      100             105             110
Thr His Arg Gln Lys Phe Leu Phe Ser Leu Ser Gln His Ile Asn Trp
      115             120             125
Val Arg Cys Ala Lys Phe Ser Pro Asp Gly Arg Leu Ile Val Ser Ala
      130             135             140
Ser Asp Asp Lys Thr Val Lys Leu Trp Asp Lys Ser Ser Arg Glu Cys
      145             150             155             160
Val His Ser Tyr Cys Glu His Gly Gly Phe Val Thr Tyr Val Asp Phe
      165             170             175
His Pro Ser Gly Thr Cys Ile Ala Ala Gly Met Asp Asn Thr Val
      180             185             190
Lys Val Trp Asp Val Arg Thr His Arg Leu Leu Gln His Tyr Gln Leu
      195             200             205
His Ser Ala Ala Val Asn Gly Leu Ser Phe His Pro Ser Gly Asn Tyr
      210             215             220
Leu Ile Thr Ala Ser Ser Asp Ser Thr Leu Lys Ile Leu Asp Leu Met
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Glu Gly Arg Leu Leu Tyr Thr Leu His Gly His Gln Gly Pro Ala Thr
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Thr Val Ala Phe Ser Arg Thr Gly Glu Tyr Phe Ala Ser Gly Gly Ser
      260             265             270
Asp Glu Gln Val Met Val Trp Lys Ser Asn Phe Asp Ile Val Asp His
      275             280             285
Gly Glu Val Thr Lys Val Pro Arg Pro Pro Ala Thr Leu Ala Ser Ser
      290             295             300
Met Gly Asn Leu Pro Glu Val Asp Phe Pro Val Pro Pro Gly Arg Gly
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Trp Ser Val Glu Ser Val Gln Ser Gln Pro Gln Glu Pro Val Ser Val
      325             330             335
Pro Gln Thr Leu Thr Ser Thr Leu Glu His Ile Val Gly Gln Leu Asp
      340             345             350
Val Leu Thr Gln Thr Val Ser Ile Leu Glu Gln Arg Leu Thr Leu Thr
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<210> 6155
<211> 995
<212> DNA
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<210> 6156
<211> 164
<212> PRT
<213> Homo sapiens

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Val Ser Ala Gly Phe Asp Ala Leu Glu Gly His Thr Pro Pro Leu Gly

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<210> 6158

<211> 455

<212> PRT

<213> Homo sapiens

<400> 6158

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Asp Phe Gly	Ala Val Arg Val	Gly Arg Ala Val	Ala Thr Thr	Ala Val	
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Ile Ser Tyr	Asp Tyr Leu Thr	Ser Leu Lys Ser	Val Pro Tyr	Gly Ser	
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Glu Glu Tyr	Leu Gln Leu Arg	Ser Lys Ile His	Asp Leu Phe	Gln Ser	
65		70		75	80
Phe Asp Asp	Thr Pro Leu Gly	Thr Ala Ser Leu	Ala Gln Val	His Lys	
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Ala Val Leu	His Asp Gly Arg	Thr Val Ala Val	Lys Val Gln	His Pro	
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Lys Val Arg	Ala Gln Ser Ser	Lys Asp Ile Leu	Leu Met Glu	Val Leu	
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Val Leu Ala	Val Lys Gln Leu	Phe Pro Glu Phe	Glu Phe Met	Trp Leu	
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Val Asp Glu	Ala Lys Lys Asn	Leu Pro Leu Glu	Leu Asp Phe	Leu Asn	
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Glu Gly Arg	Asn Ala Glu Lys	Val Ser Gln Met	Leu Arg His	Phe Asp	
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Phe Leu Lys	Val Pro Arg Ile	His Trp Asp	Leu Ser Thr	Glu Arg Val	
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Leu Leu Met	Glu Phe Val Asp	Gly Gln Val Asn	Asp Arg Asp	Tyr	
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Met Glu Arg	Asn Lys Ile Asp	Val Asn Glu Ile	Ser Arg His	Leu Gly	
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Lys Met Tyr	Ser Glu Met Ile	Phe Val Asn Gly	Phe Val His	Cys Asp	
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Pro His Pro	Gly Asn Val Leu	Val Arg Lys His	Pro Gly Thr	Gly Lys	
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Glu Phe Arg	Leu Asn Tyr Cys	His Leu Trp Gln	Ser Leu Ile	Trp Thr	
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Asp Met Lys	Arg Val Lys Glu	Tyr Ser Gln Arg	Leu Gly Ala	Gly Asp	
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Leu Tyr Pro	Leu Phe Ala Cys	Met Leu Thr Ala	Arg Ser Trp	Asp Ser	
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Val Asn Arg	Gly Ile Ser Gln	Ala Pro Val Thr	Ala Thr Glu	Asp Leu	
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Glu Ile Arg	Asn Asn Ala Ala	Asn Tyr Leu Pro	Gln Ile Ser	His Leu	
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Leu Asn His	Val Pro Arg Gln	Met Leu Leu Ile	Leu Lys Thr	Asn Asp	
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Leu Leu Arg	Gly Ile Glu Ala	Ala Leu Gly Thr	Arg Ala Ser	Ala Ser	
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Ser Phe Leu	Asn Met Ser Arg	Cys Cys Ile Arg	Ala Leu Ala	Glu His	
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Lys Lys Lys	Asn Thr Cys Ser	Phe Phe Arg Thr	Gln Ile Ser	Phe	
	405		410		415
Ser Glu Ala	Phe Asn Leu Trp	Gln Ile Asn Leu	His Glu Leu	Ile Leu	
	420		425		430
Arg Val Lys	Gly Leu Lys Leu	Ala Asp Arg Val	Leu Ala Leu	Ile Cys	
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455

<210> 6159

<211> 4310

<212> DNA

<213> Homo sapiens

<400> 6159

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<210> 6160

<211> 551

<212> PRT

<213> Homo sapiens

<400> 6160

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His	Glu	Asp	Val	Cys	Val	Phe	Lys	Cys	Ser	Val	Ser	Arg	Glu	Thr	Glu

20 25 30
 Cys Ser Arg Val Gly Lys Gln Ser Phe Ile Ile Thr Leu Gly Cys Asn
 35 40 45
 Ser Val Leu Ile Gln Phe Ala Thr Pro Asn Asp Phe Cys Ser Phe Tyr
 50 55 60
 Asn Ile Leu Lys Thr Cys Arg Gly His Thr Leu Glu Arg Ser Val Phe
 65 70 75 80
 Ser Glu Arg Thr Glu Glu Ser Ser Ala Val Gln Tyr Phe Gln Phe Tyr
 85 90 95
 Gly Tyr Leu Ser Gln Gln Gln Asn Met Gln Asp Tyr Val Arg Thr
 100 105 110
 Gly Thr Tyr Gln Arg Ala Ile Leu Gln Asn His Thr Asp Phe Lys Asp
 115 120 125
 Lys Ile Val Leu Asp Val Gly Cys Gly Ser Gly Ile Leu Ser Phe Phe
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 Ala Ala Gln Ala Gly Ala Arg Lys Ile Tyr Ala Val Glu Ala Ser Thr
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 Met Ala Gln His Ala Glu Val Leu Val Lys Ser Asn Asn Leu Thr Asp
 165 170 175
 Arg Ile Val Val Ile Pro Gly Lys Val Glu Glu Val Ser Leu Pro Glu
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 Gln Val Asp Ile Ile Ile Ser Glu Pro Met Gly Tyr Met Leu Phe Asn
 195 200 205
 Glu Arg Met Leu Glu Ser Tyr Leu His Ala Lys Lys Tyr Leu Lys Pro
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 Ser Gly Asn Met Phe Pro Thr Ile Gly Asp Val His Leu Ala Pro Phe
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 Thr Asp Glu Gln Leu Tyr Met Glu Gln Phe Thr Lys Ala Asn Phe Trp
 245 250 255
 Tyr Gln Pro Ser Phe His Gly Val Asp Leu Ser Ala Leu Arg Gly Ala
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 Ala Val Asp Glu Tyr Phe Arg Gln Pro Val Val Asp Thr Phe Asp Ile
 275 280 285
 Arg Ile Leu Met Ala Lys Ser Val Lys Tyr Thr Val Asn Phe Leu Glu
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 Ala Lys Glu Gly Asp Leu His Arg Ile Glu Ile Pro Phe Lys Phe His
 305 310 315 320
 Met Leu His Ser Gly Leu Val His Gly Leu Ala Phe Trp Phe Asp Val
 325 330 335
 Ala Phe Ile Gly Ser Ile Met Thr Val Trp Leu Ser Thr Ala Pro Thr
 340 345 350
 Glu Pro Leu Thr His Trp Tyr Gln Val Arg Cys Leu Phe Gln Ser Pro
 355 360 365
 Leu Phe Ala Lys Ala Gly Asp Thr Leu Ser Gly Thr Cys Leu Leu Ile
 370 375 380
 Ala Asn Lys Arg Gln Ser Tyr Asp Ile Ser Ile Val Ala Gln Val Asp
 385 390 395 400
 Gln Thr Gly Ser Lys Ser Ser Asn Leu Leu Asp Leu Lys Asn Pro Phe
 405 410 415
 Phe Arg Tyr Thr Gly Thr Thr Pro Ser Pro Pro Gly Ser His Tyr
 420 425 430
 Thr Ser Pro Ser Glu Asn Met Trp Asn Thr Gly Ser Thr Tyr Asn Leu
 435 440 445
 Ser Ser Gly Met Ala Val Ala Gly Met Pro Thr Ala Tyr Asp Leu Ser

450	455	460
Ser Val Ile Ala Ser Gly Ser Ser Val Gly His Asn Asn Leu Ile Pro		
465	470	475
Leu Ala Asn Thr Gly Ile Val Asn His Thr His Ser Arg Met Gly Ser		480
	485	490
Ile Met Ser Thr Gly Ile Val Gln Gly Ser Ser Gly Ala Gln Gly Ser		495
	500	505
Gly Gly Gly Ser Thr Ser Ala His Tyr Ala Val Asn Ser Gln Phe Thr		510
	515	520
Met Gly Gly Pro Ala Ile Ser Met Ala Ser Pro Met Ser Ile Pro Thr		525
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Asn Thr Met His Tyr Gly Ser		
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<210> 6161

<211> 1489

<212> DNA

<213> Homo sapiens

<400> 6161

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120
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180
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240
aaaagcagca accagcagga tgggtggaaa aaagttgctg aaggctcttc aagatcctct
300
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360
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420
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660
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1020

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 1140
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 1200
 aaccgtactt ccaccaccca agagtggatt ggagaaggca aaactagggc agagaagcca
 1260
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 1320
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 1489

<210> 6162

<211> 58

<212> PRT

<213> Homo sapiens

<400> 6162

Gly	Cys	Met	Ile	Phe	Ser	Arg	Phe	Ser	Thr	Glu	Gly	Ser	Glu	Leu	Trp
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Glu	Arg	Lys	Glu	Asp	Gly	Gly	Asn	Gly	Lys	Lys	Arg	Ser	Thr	Leu	Leu
			20				25						30		
Arg	Lys	Gly	Thr	Glu	Pro	Gly	Val	Val	Ala	His	Ala	Cys	Asn	Pro	Xaa
		35				40						45			
Thr	Leu	Gly	Gly	Arg	Ser	Lys	Glu	Ile	Thr						
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<210> 6163

<211> 713

<212> DNA

<213> Homo sapiens

<400> 6163

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 180
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 240
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 300
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 360
 tgtcattttt agaatcaaaa aggaaggaag gcagtggctg gctgcactgg tcagtaacga
 420
 gatctggagc ttttcgcctt aaggtcactg tttaaaactc tgccctgggt cagttgtaac
 480

agaaagtcac aactccctca caggcatcag ggtgcaactt tgaatgccaa gaggggctgt
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 713

<210> 6164

<211> 120

<212> PRT

<213> Homo sapiens

<400> 6164

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			20				25						30		
Pro	Leu	Pro	Gly	Lys	Ala	Gly	Leu	Ala	Leu	Leu	Lys	Pro	Gln	Ser	Arg
			35				40					45			
Ser	Asp	Gly	Tyr	Arg	Tyr	Leu	Gly	Lys	Asp	Thr	Val	Asp	Gly	Leu	Asp
	50					55				60					
Ser	Ser	Leu	Leu	Lys	Cys	Thr	Arg	Arg	Cys	Met	Arg	Gly	Phe	Arg	Leu
65				70					75					80	
Pro	Glu	Lys	Gln	Pro	Ser	Lys	Thr	Arg	Val	Ser	Phe	Leu	Glu	Ser	Lys
			85					90					95		
Arg	Lys	Glu	Gly	Ser	Gly	Trp	Leu	His	Trp	Ser	Val	Thr	Arg	Ser	Gly
			100				105						110		
Ala	Phe	Arg	Leu	Lys	Val	Thr	Val								
			115				120								

<210> 6165

<211> 1004

<212> DNA

<213> Homo sapiens

<400> 6165

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 120
 atccagcggc tgcgggacac ggaagagatg ttaagcaaga aacaggagtt cctggagaag
 180
 aaaatcgagc aggagctgac ggccgccaag aagcacggca ccaaaaacaa gcgcggggcc
 240
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 720
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 840
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<210> 6166

<211> 239

<212> PRT

<213> Homo sapiens

<400> 6166

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Ser	Val	Phe	Gly	Lys	Leu	Phe	Gly	Ala	Gly	Gly	Gly	Lys	Ala	Gly	Lys
			20					25				30			
Gly	Gly	Pro	Thr	Pro	Gln	Glu	Ala	Ile	Gln	Arg	Leu	Arg	Asp	Thr	Glu
		35				40					45				
Glu	Met	Leu	Ser	Lys	Lys	Gln	Glu	Phe	Leu	Glu	Lys	Lys	Ile	Glu	Gln
	50					55					60				
Glu	Leu	Thr	Ala	Ala	Lys	His	Gly	Thr	Lys	Asn	Lys	Arg	Ala	Ala	
65					70				75				80		
Leu	Gln	Ala	Leu	Lys	Arg	Lys	Lys	Arg	Tyr	Glu	Lys	Gln	Leu	Ala	Gln
			85					90					95		
Ile	Asp	Gly	Thr	Leu	Ser	Thr	Ile	Glu	Phe	Gln	Arg	Glu	Ala	Leu	Glu
			100					105					110		
Asn	Ala	Asn	Thr	Asn	Thr	Glu	Val	Leu	Lys	Asn	Met	Gly	Tyr	Ala	Ala
		115				120						125			
Lys	Ala	Met	Lys	Ala	Ala	His	Asp	Asn	Met	Asp	Ile	Asp	Lys	Val	Asp
	130					135					140				
Glu	Leu	Met	Gln	Asp	Ile	Ala	Asp	Gln	Gln	Glu	Leu	Ala	Glu	Glu	Ile
145				150					155					160	
Ser	Thr	Ala	Ile	Ser	Lys	Pro	Val	Gly	Phe	Gly	Glu	Glu	Phe	Asp	Glu
			165					170						175	
Asp	Glu	Leu	Met	Ala	Glu	Leu	Glu	Glu	Leu	Glu	Gln	Glu	Glu	Leu	Asp
		180					185						190		
Lys	Asn	Leu	Leu	Glu	Ile	Ser	Gly	Pro	Glu	Thr	Val	Pro	Leu	Pro	Asn
	195					200						205			
Val	Pro	Ser	Ile	Ala	Leu	Pro	Ser	Lys	Pro	Ala	Lys	Lys	Lys	Glu	Glu
	210					215						220			
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225

230

235

<210> 6167

<211> 1220

<212> DNA

<213> Homo sapiens

<400> 6167

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tcaaacttgt cttaatgaga tggaagtgtt ggatcaaaca ctgattgagc tgttctatgt
180
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240
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360
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480
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540
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660
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720
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780
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<210> 6168

<211> 90

<212> PRT

<213> Homo sapiens

<400> 6168

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Pro Gly Thr Gly Glu Val Glu Asp Ile Glu Gln Leu Asn Gln Cys Leu
      20           25           30
Ile Gln His Phe His Leu Ile Lys Thr Ser Leu Ile Phe Leu Cys Phe
      35           40           45
Leu Phe His Gly Ile His Glu Asn Leu Leu Thr Val Gly Val Ser Lys
      50           55           60
Glu Ala Tyr Leu Met Thr Ser Val Asn Gly Lys Asn Lys Thr Lys Met
      65           70           75           80
Leu Tyr Gly Gln Ser His Lys Gly Lys Asp
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<210> 6169

<211> 720

<212> DNA

<213> Homo sapiens

<400> 6169

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120
cagtgaacccc aggcttttta tggctgtgaa acacgttaaa atttcagggt aagacgtgac
180
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<210> 6170

<211> 101

<212> PRT

<213> Homo sapiens

<400> 6170

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Arg Glu Gly Arg Ser Asn Gly Glu Thr Pro Ala Val Asp Ile Gly Ala			
35	40	45	
Ala Asp Leu Ala His Ala Gln Gln Gln Gln Gln Trp His Leu Ile			
50	55	60	
Asn His Gln Pro Ser Arg Ser Pro Ser Ser Trp Leu Lys Arg Leu Ile			
65	70	75	80
Ser Ser Pro Trp Glu Leu Glu Val Leu Gln Val Pro Cys Gly Glu Gln			
85	90	95	
Leu Leu Arg Arg Arg			
100			

<210> 6171

<211> 1130

<212> DNA

<213> Homo sapiens

<400> 6171

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180
cgggacaggg atgtctacct ggtaatagag gacttgaagc agaaagcaag tgaatacgag
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1020

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<210> 6172

<211> 292

<212> PRT

<213> Homo sapiens

<400> 6172

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35 40 45
Glu Ile Leu His His Leu Ser Glu Arg Asn Arg Val Arg Asp Arg Asp
50 55 60
Val Tyr Leu Val Ile Glu Asp Leu Lys Gln Lys Ala Ser Glu Tyr Glu
65 70 75 80
Ser Glu Ala Lys Tyr Leu Gln Asp Leu Leu Met Glu Ser Val Asn Phe
85 90 95
Ser Pro Ala Asn Leu Ser Ser Thr Gly Ser Arg Tyr Leu Asn Ala Leu
100 105 110
Val Asp Ser Ala Val Ala Leu Glu Thr Lys Asp Thr Ser Leu Ala Ser
115 120 125
Phe Ile Pro Ala Val Asn Asp Leu Thr Ser Asp Leu Phe Arg Thr Lys
130 135 140
Ser Lys Ser Glu Glu Ile Lys Ile Glu Leu Glu Lys Leu Glu Lys Asn
145 150 155 160
Leu Thr Ala Thr Leu Val Leu Glu Lys Cys Leu Gln Glu Asp Val Lys
165 170 175
Lys Ala Glu Leu His Leu Ser Thr Glu Arg Ala Lys Val Asp Asn Arg
180 185 190
Arg Gln Asn Met Asp Phe Leu Lys Ala Lys Ser Glu Glu Phe Arg Phe
195 200 205
Gly Ile Lys Ala Ala Glu Glu Gln Leu Ser Ala Arg Gly Met Asp Ala
210 215 220
Ser Leu Ser His Gln Ser Leu Val Ala Leu Ser Glu Lys Leu Ala Arg
225 230 235 240
Leu Lys Gln Gln Thr Ile Pro Leu Lys Lys Lys Leu Glu Ser Tyr Leu
245 250 255
Asp Leu Met Pro Asn Pro Ser Leu Ala Gln Val Lys Ile Glu Glu Ala
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Lys Arg Glu Leu Asp Ser Ile Glu Ala Glu Leu Thr Arg Arg Val Asp
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Met Met Glu Leu
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<210> 6173

<211> 1483

<212> DNA

<213> Homo sapiens

<400> 6173

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240
catgaacagg tggacactag tgtggtcagc cagcgagcca aggagctgaa caagcggctc
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660
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720
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1080
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1260
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<210> 6174

<211> 299

<212> PRT

<213> Homo sapiens

<400> 6174

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      20          25          30
Gly Tyr Ala Leu Leu Val Ser Asp Leu Gln Gln Val Trp His Glu Gln
      35          40          45
Val Asp Thr Ser Val Val Ser Gln Arg Ala Lys Glu Leu Asn Lys Arg
      50          55          60
Leu Thr Ala Pro Pro Ala Ala Phe Leu Cys His Leu Asp Asn Leu Leu
      65          70          75          80
Arg Pro Leu Leu Lys Asp Ala Ala His Pro Ser Glu Ala Thr Phe Ser
      85          90          95
Cys Asp Cys Val Ala Asp Ala Leu Ile Leu Arg Val Arg Ser Glu Leu
      100          105          110
Ser Gly Leu Pro Phe Tyr Trp Asn Phe His Cys Met Leu Ala Ser Pro
      115          120          125
Ser Leu Val Ser Gln His Leu Ile Arg Pro Leu Met Gly Met Ser Leu
      130          135          140
Ala Leu Gln Cys Gln Val Arg Glu Leu Ala Thr Leu Leu His Met Lys
      145          150          155          160
Asp Leu Glu Ile Gln Asp Tyr Gln Glu Ser Gly Ala Thr Leu Ile Arg
      165          170          175
Asp Arg Leu Lys Thr Glu Pro Phe Glu Glu Asn Ser Phe Leu Glu Gln
      180          185          190
Phe Met Ile Glu Lys Leu Pro Glu Ala Cys Ser Ile Gly Asp Gly Lys
      195          200          205
Pro Phe Val Met Asn Leu Gln Asp Leu Tyr Met Ala Val Thr Thr Gln
      210          215          220
Glu Val Gln Val Gly Gln Lys His Gln Gly Ala Gly Asp Pro His Thr
      225          230          235          240
Ser Asn Ser Ala Ser Leu Gln Gly Ile Asp Ser Gln Cys Val Asn Gln
      245          250          255
Pro Glu Gln Leu Val Ser Ser Ala Pro Thr Leu Ser Ala Pro Glu Lys
      260          265          270
Glu Ser Thr Gly Thr Ser Gly Pro Leu Gln Arg Pro Gln Leu Ser Lys
      275          280          285
Val Lys Arg Lys Asn Pro Arg Gly Leu Phe Ser
      290          295

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<210> 6175

<211> 349

<212> DNA

<213> Homo sapiens

<400> 6175

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aggactggga tttcaaatat gcgtgcatta gagaatgact ttttcaattc tcccccaaga
120

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aaaactgttc agtttggtgg aactgtgaca gaagtcttgc tgaagtacaa aaaggggtgaa
 180
 acaaatgact ttgagttggt gaagaaccag ctggttagatc cagacataaa gagattgcct
 240
 tggttgaata gaagtcaaac agtagtgga gagtatttgg cttttcttgg taatcttgta
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 349

<210> 6176

<211> 90

<212> PRT

<213> Homo sapiens

<400> 6176

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Val	Gln	Phe	Gly	Gly	Thr	Val	Thr	Glu	Val	Leu	Leu	Lys	Tyr	Lys	Lys
			20					25					30		
Gly	Glu	Thr	Asn	Asp	Phe	Glu	Leu	Leu	Lys	Asn	Gln	Leu	Leu	Asp	Pro
			35				40					45			
Asp	Ile	Lys	Arg	Leu	Pro	Trp	Leu	Asn	Arg	Ser	Gln	Thr	Val	Val	Glu
	50					55				60					
Glu	Tyr	Leu	Ala	Phe	Leu	Gly	Asn	Leu	Val	Ser	Ala	Gln	Thr	Val	Phe
65					70				75					80	
Leu	Arg	Pro	Cys	Leu	Ser	Met	Ile	Ala	Ser						
				85					90						

<210> 6177

<211> 1536

<212> DNA

<213> Homo sapiens

<400> 6177

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 240
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 600

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 660
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 720
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 780
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 840
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 1380
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 1440
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 1536

<210> 6178

<211> 310

<212> PRT

<213> Homo sapiens

<400> 6178

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Ser	Gly	Gly	Phe	Gln	Val	Lys	Leu	Tyr	Asp	Ile	Glu	Gln	Gln	Gln	Ile
			20					25					30		
Arg	Asn	Ala	Leu	Glu	Asn	Ile	Arg	Lys	Glu	Met	Lys	Leu	Leu	Glu	Gln
		35					40				45				
Ala	Gly	Ser	Leu	Lys	Gly	Ser	Leu	Ser	Val	Glu	Glu	Gln	Leu	Ser	Leu
	50					55				60					
Ile	Ser	Gly	Cys	Pro	Asn	Ile	Gln	Glu	Ala	Val	Glu	Gly	Ala	Met	His
65				70					75					80	
Ile	Gln	Glu	Cys	Val	Pro	Glu	Asp	Leu	Glu	Leu	Lys	Lys	Lys	Ile	Phe
			85					90						95	
Ala	Gln	Leu	Asp	Ser	Ile	Ile	Asp	Asp	Arg	Val	Ile	Leu	Ser	Ser	Ser
			100					105				110			
Thr	Ser	Cys	Leu	Met	Pro	Ser	Lys	Leu	Phe	Ala	Gly	Leu	Val	His	Val

115	120	125
Lys Gln Cys Ile Val Ala His Pro Val Asn Pro Pro Tyr Tyr Ile Pro		
130	135	140
Leu Val Glu Leu Val Pro His Pro Glu Thr Ala Pro Thr Thr Val Asp		
145	150	155
Arg Thr His Ala Leu Met Lys Lys Ile Gly Xaa Val Pro His Ala Ser		
165	170	175
Pro Glu Gly Gly Gly Arg Leu Arg Ser Glu Pro Pro Ala Ile Cys Asn		
180	185	190
His Gln Arg Gly Leu Ala Ala Ser Gly Gly Arg Asn Xaa Cys Leu Leu		
195	200	205
Val Thr Trp Xaa Leu Val Met Ser Glu Gly Leu Gly Met Arg Tyr Ala		
210	215	220
Phe Ile Gly Pro Leu Glu Thr Met His Leu Asn Ala Glu Gly Met Leu		
225	230	235
Ser Tyr Cys Asp Arg Tyr Ser Glu Gly Ile Lys His Val Leu Gln Thr		
245	250	255
Phe Gly Pro Ile Pro Glu Phe Ser Arg Ala Thr Ala Glu Lys Val Asn		
260	265	270
Gln Asp Met Cys Met Lys Val Pro Asp Asp Pro Glu His Leu Ala Ala		
275	280	285
Arg Arg Gln Trp Arg Asp Glu Cys Leu Met Arg Leu Ala Lys Leu Lys		
290	295	300
Ser Gln Val Gln Pro Gln		
305	310	

<210> 6179

<211> 2940

<212> DNA

<213> Homo sapiens

<400> 6179

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120
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180
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420
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480
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540
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600
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660

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780
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<210> 6180

<211> 751

<212> PRT

<213> Homo sapiens

<400> 6180

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Arg	Val	Thr	Met	Asn	Phe	Ile	Trp	Pro	Phe	Leu	Met	Asn	Cys	Thr	Thr
			20					25					30		
Trp	Arg	Xaa	Tyr	Leu	Thr	Asp	Glu	Phe	Ala	Lys	Gly	Arg	Lys	Val	Ala
		35				40						45			
Asp	Leu	Tyr	Glu	Leu	Val	Gln	Tyr	Ala	Gly	Asn	Ile	Ile	Pro	Arg	Leu
	50					55					60				
Tyr	Leu	Leu	Ile	Thr	Val	Gly	Val	Val	Tyr	Val	Lys	Ser	Phe	Pro	Gln
65					70					75					80
Ser	Arg	Lys	Asp	Ile	Leu	Lys	Asp	Leu	Val	Glu	Met	Cys	Arg	Gly	Val
			85					90						95	
Gln	His	Pro	Leu	Arg	Gly	Leu	Phe	Leu	Arg	Asn	Tyr	Leu	Leu	Gln	Cys
			100					105						110	
Thr	Arg	Asn	Ile	Leu	Pro	Asp	Glu	Gly	Glu	Pro	Thr	Asp	Glu	Glu	Thr
		115					120						125		
Thr	Gly	Asp	Ile	Ser	Asp	Ser	Met	Asp	Phe	Val	Leu	Leu	Asn	Phe	Ala
	130					135					140				
Glu	Met	Asn	Lys	Leu	Trp	Val	Arg	Met	Gln	His	Gln	Gly	His	Ser	Arg
145				150						155					160
Asp	Arg	Glu	Lys	Arg	Glu	Arg	Glu	Arg	Gln	Glu	Leu	Arg	Ile	Leu	Val
			165						170					175	
Gly	Thr	Asn	Leu	Val	Arg	Leu	Ser	Xaa	Ser	Trp	Arg	Cys	Lys	Cys	Gly
			180					185					190		
Thr	Leu	Gln	Gln	Ile	Val	Leu	Thr	Gly	Ile	Leu	Glu	Gln	Val	Val	Asn

195	200	205
Cys Arg Asp Ala Leu Ala Gln Glu Tyr Leu Met Glu Cys Ile Ile Gln		
210	215	220
Val Phe Pro Asp Glu Phe His Leu Gln Thr Leu Asn Pro Phe Leu Arg		
225	230	235
Ala Cys Ala Glu Leu His Gln Asn Val Asn Val Lys Asn Ile Ile Ile		
245	250	255
Ala Leu Ile Asp Arg Leu Ala Leu Phe Ala His Arg Glu Asp Gly Pro		
260	265	270
Gly Ile Pro Ala Asp Ile Lys Leu Phe Asp Ile Phe Ser Gln Gln Val		
275	280	285
Ala Thr Val Ile Gln Ser Arg Gln Asp Met Pro Ser Glu Asp Val Val		
290	295	300
Ser Leu Gln Val Ser Leu Ile Asn Leu Ala Met Lys Cys Tyr Pro Asp		
305	310	315
Arg Val Asp Tyr Val Asp Lys Val Leu Glu Thr Thr Val Glu Ile Phe		
325	330	335
Asn Lys Leu Asn Leu Glu His Ile Ala Thr Ser Ser Ala Val Ser Lys		
340	345	350
Glu Leu Thr Arg Leu Leu Lys Ile Pro Val Asp Thr Tyr Asn Asn Ile		
355	360	365
Leu Thr Val Leu Lys Leu Lys His Phe His Pro Leu Phe Glu Tyr Phe		
370	375	380
Asp Tyr Glu Ser Arg Lys Ser Met Ser Cys Tyr Val Leu Ser Asn Val		
385	390	395
Leu Asp Tyr Asn Thr Glu Ile Val Ser Gln Asp Gln Val Asp Ser Ile		
405	410	415
Met Asn Leu Val Ser Thr Leu Ile Gln Asp Gln Pro Asp Gln Pro Val		
420	425	430
Glu Asp Pro Asp Pro Glu Asp Phe Ala Asp Glu Gln Ser Leu Val Gly		
435	440	445
Arg Phe Ile His Leu Leu Arg Ser Glu Asp Pro Asp Gln Gln Tyr Leu		
450	455	460
Ile Leu Asn Thr Ala Arg Lys His Phe Gly Ala Gly Gly Asn Gln Arg		
465	470	475
Ile Arg Phe Thr Leu Pro Pro Leu Val Phe Ala Ala Tyr Gln Leu Ala		
485	490	495
Phe Arg Tyr Lys Glu Asn Ser Lys Trp Met Thr Asn Gly Lys Arg Asn		
500	505	510
Ala Arg Arg Phe Phe His Leu Pro Xaa Gln Thr Ile Ser Ala Leu Ile		
515	520	525
Lys Ala Glu Leu Ala Glu Leu Pro Leu Arg Leu Phe Leu Gln Gly Ala		
530	535	540
Leu Ala Ala Gly Glu Ile Gly Phe Glu Asn His Glu Thr Val Ala Tyr		
545	550	555
Glu Phe Met Ser Gln Ala Phe Ser Leu Tyr Glu Asp Glu Ile Ser Asp		
565	570	575
Ser Lys Ala Gln Leu Ala Ala Ile Thr Leu Ile Ile Gly Thr Phe Glu		
580	585	590
Arg Met Lys Cys Phe Ser Glu Glu Asn His Glu Pro Leu Arg Thr Gln		
595	600	605
Cys Ala Leu Ala Ala Ser Lys Leu Leu Lys Lys Pro Asp Gln Gly Arg		
610	615	620
Ala Glu His Leu Cys Thr Ser Leu Trp Ser Gly Arg Asn Thr Asp Lys		

625		630		635		640
Asn Gly Glu Glu Leu His Gly Gly Lys Arg Val Met Glu Cys Leu Lys						
	645		650		655	
Lys Ala Leu Lys Ile Ala Asn Gln Cys Met Asp Pro Ser Leu Gln Val						
	660		665		670	
Gln Leu Phe Ile Glu Ile Leu Asn Arg Tyr Ile Tyr Phe Tyr Glu Lys						
	675		680		685	
Glu Asn Asp Ala Val Thr Ile Gln Val Leu Asn Gln Leu Ile Gln Lys						
	690		695		700	
Ile Arg Glu Asp Leu Pro Asn Leu Glu Ser Ser Glu Glu Thr Glu Gln						
705		710		715		720
Ile Asn Lys His Phe His Asn Thr Leu Glu His Leu Arg Leu Arg Arg						
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Glu Ser Pro Glu Ser Glu Gly Pro Ile Tyr Glu Gly Leu Ile Leu						
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<210> 6181

<211> 1135

<212> DNA

<213> Homo sapiens

<400> 6181

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 180
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 240
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 720
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 780
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<210> 6182

<211> 236

<212> PRT

<213> Homo sapiens

<400> 6182

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		20						25					30		
Glu	Val	Phe	Phe	Leu	Pro	Asp	Leu	Pro	Thr	Thr	Pro	Tyr	Phe	Ser	Arg
		35					40					45			
Asp	Ala	Gln	Lys	His	Asp	Val	Glu	Val	Leu	Glu	Arg	Asn	Phe	Gln	Thr
		50				55					60				
Ile	Leu	Cys	Glu	Phe	Glu	Thr	Leu	Tyr	Lys	Ala	Phe	Ser	Asn	Cys	Ser
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Leu	Pro	Gln	Gly	Trp	Lys	Met	Asn	Ser	Thr	Pro	Ser	Gly	Glu	Trp	Phe
			85						90				95		
Thr	Phe	Tyr	Leu	Val	Asn	Gln	Gly	Val	Cys	Val	Pro	Arg	Asn	Cys	Arg
			100					105					110		
Lys	Cys	Pro	Arg	Thr	Tyr	Arg	Leu	Leu	Gly	Ser	Leu	Arg	Thr	Cys	Ile
		115					120					125			
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	130					135					140				
Thr	Val	Ile	Thr	Glu	His	Tyr	Gly	Pro	Thr	Asn	Ile	Arg	Ile	Arg	Cys
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His	Leu	Gly	Leu	Lys	Thr	Pro	Asn	Gly	Cys	Glu	Leu	Val	Val	Gly	Gly
				165				170					175		
Glu	Pro	Gln	Cys	Trp	Ala	Glu	Gly	Arg	Cys	Leu	Leu	Phe	Asp	Asp	Ser
		180						185					190		
Phe	Leu	His	Ala	Ala	Phe	His	Glu	Gly	Ser	Ala	Glu	Asp	Gly	Pro	Arg
		195					200					205			
Val	Val	Phe	Met	Val	Asp	Leu	Trp	His	Pro	Asn	Val	Ala	Ala	Ala	Glu
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<210> 6183

<211> 2530

<212> DNA

<213> Homo sapiens

<400> 6183

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<210> 6184

<211> 308

<212> PRT

<213> Homo sapiens

<400> 6184

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		20						25				30			
Gly	Met	Gly	Asn	Arg	Gly	Gly	Phe	Arg	Gly	Gly	Phe	Gly	Ser	Gly	Ile
		35					40					45			
Arg	Gly	Arg	Gly	Arg	Gly	Arg	Gly	Arg	Gly	Arg	Gly	Arg	Gly	Arg	Gly
		50				55					60				
Ala	Arg	Gly	Gly	Lys	Ala	Glu	Asp	Lys	Glu	Trp	Met	Pro	Val	Thr	Lys
65				70				75					80		
Leu	Gly	Arg	Leu	Val	Lys	Asp	Met	Lys	Ile	Lys	Ser	Leu	Glu	Glu	Ile
			85					90					95		
Tyr	Leu	Phe	Ser	Leu	Pro	Ile	Lys	Glu	Ser	Glu	Ile	Ile	Asp	Phe	Phe
		100					105					110			
Leu	Gly	Ala	Ser	Leu	Lys	Asp	Glu	Val	Leu	Lys	Ile	Met	Pro	Val	Gln
		115				120					125				
Lys	Gln	Thr	Arg	Ala	Gly	Gln	Arg	Thr	Arg	Phe	Lys	Ala	Phe	Val	Ala
	130					135					140				
Ile	Gly	Asp	Tyr	Asn	Gly	His	Val	Gly	Leu	Gly	Val	Lys	Cys	Ser	Lys

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 Ile Val Pro Val Arg Arg Gly Tyr Trp Gly Asn Lys Ile Gly Lys Pro
 180 185 190
 His Thr Val Pro Cys Lys Val Thr Gly Arg Cys Gly Ser Val Leu Val
 195 200 205
 Arg Leu Ile Pro Ala Pro Arg Gly Thr Gly Ile Val Ser Ala Pro Val
 210 215 220
 Pro Lys Lys Leu Leu Met Met Ala Gly Ile Asp Asp Cys Tyr Thr Ser
 225 230 235 240
 Ala Arg Gly Cys Thr Ala Thr Leu Gly Asn Phe Ala Lys Ala Thr Phe
 245 250 255
 Asp Ala Ile Ser Lys Thr Tyr Ser Tyr Leu Thr Pro Asp Leu Trp Lys
 260 265 270
 Glu Thr Val Phe Thr Lys Ser Pro Tyr Gln Glu Phe Thr Asp His Leu
 275 280 285
 Val Lys Thr His Thr Arg Val Ser Val Gln Arg Thr Gln Ala Pro Ala
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<210> 6185

<211> 1231

<212> DNA

<213> Homo sapiens

<400> 6185

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 360
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 720
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<210> 6186

<211> 133

<212> PRT

<213> Homo sapiens

<400> 6186

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Tyr	Ser	Pro	Asn	Thr	Ala	Tyr	Gly	Val	Asp	Phe	Leu	Val	Pro	Val	Met
			20					25					30		
Gly	Tyr	Ile	Cys	Arg	Ile	Cys	His	Lys	Phe	Tyr	His	Ser	Asn	Ser	Gly
	35						40					45			
Ala	Gln	Leu	Ser	His	Cys	Lys	Ser	Leu	Gly	His	Phe	Glu	Asn	Leu	Gln
	50					55					60				
Lys	Tyr	Lys	Ala	Ala	Lys	Asn	Pro	Ser	Pro	Thr	Thr	Arg	Pro	Val	Ser
65					70					75				80	
Arg	Arg	Cys	Ala	Ile	Asn	Ala	Arg	Asn	Ala	Leu	Thr	Ala	Leu	Phe	Thr
			85					90						95	
Ser	Ser	Gly	Arg	Pro	Pro	Ser	Gln	Pro	Asn	Thr	Gln	Asp	Lys	Thr	Pro
			100					105					110		
Ser	Lys	Val	Thr	Ala	Arg	Pro	Ser	Gln	Pro	Pro	Leu	Pro	Arg	Arg	Ser
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Thr	Arg	Leu	Lys	Thr											
		130													

<210> 6187

<211> 909

<212> DNA

<213> Homo sapiens

<400> 6187

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 180

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<211> 227

<212> PRT

<213> Homo sapiens

<400> 6188

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			20					25					30		
Glu	Ala	Leu	Leu	Asp	Glu	Asp	Thr	Leu	Phe	Cys	Gln	Gly	Leu	Glu	Val
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Phe	Tyr	Pro	Glu	Leu	Gly	Asn	Ile	Gly	Cys	Lys	Val	Val	Pro	Asp	Cys
	50					55					60				
Asn	Asn	Tyr	Arg	Gln	Lys	Ile	Thr	Ser	Trp	Met	Glu	Pro	Ile	Val	Lys
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Phe	Pro	Gly	Ala	Val	Tyr	Gly	Ala	Thr	Tyr	Ile	Leu	Val	Met	Val	Asp
			85					90					95		
Pro	Asp	Ala	Pro	Ser	Arg	Ala	Glu	Pro	Arg	Gln	Arg	Phe	Trp	Arg	His
			100					105					110		
Trp	Leu	Val	Thr	Asp	Ile	Lys	Gly	Ala	Asp	Leu	Lys	Lys	Gly	Lys	Ile
		115					120					125			
Gln	Gly	Gln	Glu	Leu	Ser	Ala	Tyr	Gln	Ala	Pro	Ser	Pro	Pro	Ala	His
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Ser	Gly	Phe	His	Arg	Tyr	Gln	Phe	Phe	Val	Tyr	Leu	Gln	Glu	Gly	Lys
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Val	Ile	Ser	Leu	Leu	Pro	Lys	Glu	Asn	Lys	Thr	Arg	Gly	Ser	Trp	Lys

				165						170					175
Met	Asp	Arg	Phe	Leu	Asn	Arg	Phe	His	Leu	Gly	Glu	Pro	Glu	Ala	Ser
			180					185					190		
Thr	Gln	Phe	Met	Thr	Gln	Asn	Tyr	Gln	Asp	Ser	Pro	Thr	Leu	Gln	Ala
		195					200					205			
Pro	Arg	Glu	Arg	Ala	Ser	Glu	Pro	Lys	His	Lys	Asn	Gln	Ala	Glu	Ile
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Ala	Ala	Cys													
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<210> 6189

<211> 2761

<212> DNA

<213> Homo sapiens

<400> 6189

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1140

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<210> 6190

<211> 576

<212> PRT

<213> Homo sapiens

<400> 6190

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 Pro Pro Ala Arg Gln Ser Pro Pro Ala Arg Gln Thr Pro Pro Ala Trp
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<211> 3021

<212> DNA

<213> Homo sapiens

<400> 6191

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<211> 815

<212> PRT

<213> Homo sapiens

<400> 6192

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Asp	Asp	Thr	His	Tyr	Phe	Val	Met	Thr	Ala	Lys	Lys	Gln	Cys	Leu	Leu
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Arg	Leu	Gly	Val	Leu	Arg	Gln	Asp	Trp	Pro	Asp	Thr	Asn	Arg	Leu	Leu
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Gly	Ser	Ala	Asn	Val	Val	Thr	Glu	Ala	Leu	Gln	Arg	Phe	Thr	Arg	Ala
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Ala	Ala	Asp	Phe	Ala	Thr	His	Gly	Lys	Leu	Gly	Lys	Leu	Glu	Phe	Ala
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Gln	Asp	Ala	His	Gly	Gln	Pro	Asp	Val	Ser	Ala	Phe	Asp	Phe	Thr	Ser
		100						105					110		
Met	Met	Arg	Ala	Glu	Ser	Ser	Ala	Arg	Val	Gln	Glu	Lys	His	Gly	Ala
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Arg	Leu	Leu	Leu	Gly	Leu	Val	Gly	Asp	Cys	Leu	Val	Glu	Pro	Phe	Trp
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Pro	Leu	Gly	Thr	Gly	Val	Ala	Arg	Gly	Phe	Leu	Ala	Ala	Phe	Asp	Ala

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Leu Ala Glu Arg Glu Ser Leu Tyr Gln Leu Leu Ser Gln Thr Ser Pro						
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Glu Asn Met His Arg Asn Val Ala Gln Tyr Gly Leu Asp Pro Ala Thr						
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Arg Tyr Pro Asn Leu Asn Leu Arg Ala Val Thr Pro Asn Gln Val Arg						
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Asp Leu Tyr Asp Val Leu Ala Lys Glu Pro Val Gln Arg Asn Asn Asp						
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Lys Thr Asp Thr Gly Met Pro Ala Thr Gly Ser Ala Gly Thr Gln Glu						
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Glu Leu Leu Arg Trp Cys Gln Glu Gln Thr Ala Gly Tyr Pro Gly Val						
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His Val Ser Asp Leu Ser Ser Ser Trp Ala Asp Gly Leu Ala Leu Cys						
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Ala Leu Val Tyr Arg Leu Gln Pro Gly Leu Leu Glu Pro Ser Glu Leu						
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Gln Gly Leu Gly Ala Leu Glu Ala Thr Ala Trp Ala Leu Lys Val Ala						
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Glu Asn Glu Leu Gly Ile Thr Pro Val Val Ser Ala Gln Ala Val Val						
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Ala Gly Ser Asp Pro Leu Gly Leu Ile Ala Tyr Leu Ser His Phe His						
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Ser Ala Phe Lys Ser Met Ala His Ser Pro Gly Pro Val Ser Gln Ala						
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Ser Pro Gly Thr Ser Ser Ala Val Leu Phe Leu Ser Lys Leu Gln Arg						
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Thr Leu Gln Arg Ser Arg Ala Lys Asp Leu Leu Gln Glu Asn Ala Glu						
	385		390			395
Asp Ala Gly Gly Lys Lys Leu Arg Leu Glu Met Glu Ala Glu Thr Pro						
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Ser Thr Glu Val Pro Pro Asp Pro Glu Pro Gly Val Pro Leu Thr Pro						
	420		425			430
Pro Ser Gln His Gln Glu Ala Gly Ala Gly Asp Leu Cys Ala Leu Cys						
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Gly Glu His Leu Tyr Val Leu Glu Arg Leu Cys Val Asn Gly His Phe						
	450		455			460
Phe His Arg Ser Cys Phe Arg Cys His Thr Cys Glu Ala Thr Leu Trp						
	465		470			475
Pro Gly Gly Tyr Glu Gln His Pro Gly Asp Gly His Phe Tyr Cys Leu						
	485		490			495
Gln His Leu Pro Gln Thr Asp His Lys Ala Glu Gly Ser Asp Arg Gly						
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Pro Glu Ser Pro Glu Leu Pro Thr Pro Ser Glu Asn Ser Met Pro Pro						
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Gly Leu Ser Thr Pro Thr Ala Ser Gln Glu Gly Ala Gly Pro Val Pro						
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Asp Pro Ser Gln Pro Thr Arg Arg Gln Ile Arg Leu Ser Ser Pro Glu						
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Arg Gln Arg Leu Ser Ser Leu Asn Leu Thr Pro Asp Pro Glu Met Glu						
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Pro Pro Pro Lys Pro Pro Arg Ser Cys Ser Ala Leu Ala Arg His Ala						

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Glu	Glu	Glu	Glu	Glu	Asp	Val	Pro	Leu	Asp	Ser	Asp	Val	Glu	Gln	Ala
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Leu	Gln	Thr	Phe	Ala	Lys	Thr	Ser	Gly	Thr	Met	Asn	Asn	Tyr	Pro	Thr
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Trp	Arg	Arg	Thr	Leu	Leu	Arg	Arg	Ala	Lys	Glu	Glu	Glu	Met	Lys	Arg
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Gln	Leu	Leu	Gln	Leu	Val	Asp	Lys	Lys	Asn	Ser	Leu	Val	Ala	Glu	Glu
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Ala	Glu	Leu	Met	Ile	Thr	Val	Gln	Glu	Leu	Asn	Leu	Glu	Glu	Lys	Gln
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Trp	Gln	Leu	Asp	Gln	Glu	Leu	Arg	Gly	Tyr	Met	Asn	Arg	Glu	Glu	Asn
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Leu	Lys	Thr	Ala	Ala	Asp	Arg	Gln	Ala	Glu	Asp	Gln	Val	Leu	Arg	Lys
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Leu	Val	Asp	Leu	Val	Asn	Gln	Arg	Asp	Ala	Leu	Ile	Arg	Phe	Gln	Glu
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<210> 6193

<211> 2893

<212> DNA

<213> Homo sapiens

<400> 6193

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300

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<212> PRT

<213> Homo sapiens

<400> 6194

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			20					25					30		
Asn	Thr	His	Arg	Ala	Ile	Glu	Ser	Asn	Ser	Gln	Thr	Ser	Pro	Leu	Asn
			35					40					45		
Ala	Glu	Val	Val	Gln	Tyr	Ala	Lys	Glu	Val	Val	Asp	Phe	Ser	Ser	His
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Val	Pro	Asn	Val	Phe	Pro	Ser	Ser	Gly	Asp	Phe	Thr	Gln	Thr	Ala	Val
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Phe	Arg	Thr	Tyr	Gly	Thr	Trp	Trp	Asp	Gln	Cys	Pro	Ser	Ala	Ser	Leu
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Leu	Thr	Phe	Glu	Gln	Gln	Val	Tyr	Pro	Thr	Ala	Val	His	Val	Leu	Glu
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Thr	Tyr	His	Pro	Gly	Ala	Val	Ile	Arg	Ile	Leu	Ala	Cys	Ser	Ala	Asn
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Pro	Tyr	Ser	Pro	Asn	Pro	Pro	Ala	Glu	Val	Arg	Trp	Glu	Ile	Leu	Trp

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<210> 6195

<211> 518

<212> DNA

<213> Homo sapiens

<400> 6195

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<210> 6196

<211> 117

<212> PRT

<213> Homo sapiens

<400> 6196

Met Trp Ser Gln Lys Ala Ser Ser Gln Gln His Gly Thr Met Arg Val
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 Arg Pro Val Leu Cys Ser Pro Ser Trp Phe Pro Gly Glu Lys Phe Pro
 20 25 30
 Leu Leu Leu Ser Arg Thr Thr Arg Val Lys Pro His Pro Tyr Lys Tyr
 35 40 45
 Gln Val His Pro Asn Ser Ser Leu Ala Gln Lys Trp Cys Tyr Ile His
 50 55 60
 Trp Glu Gln Thr Cys Ile Pro Thr Pro Arg His Val Thr Thr Gly Thr
 65 70 75 80
 Ala Asn Glu Leu Cys Pro Gly Asn Ser Phe Thr Pro Ser Ser Cys Ser
 85 90 95
 Phe His Ser His Leu Leu Ser Thr Asn Tyr Ala Lys Asn Tyr Val Gln
 100 105 110
 His Arg Thr Gly Trp
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<210> 6197

<211> 2841

<212> DNA

<213> Homo sapiens

<400> 6197

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2700
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2820
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2841

<210> 6198

<211> 124

<212> PRT

<213> Homo sapiens

<400> 6198

Met Gly Ala Ser His Gly Asn Trp Glu Val Pro Arg Gln Ser Gln Arg

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Phe His Arg Arg Ser Gln Arg Val Thr Lys Gly Ser Pro Gly Pro Gly			
	20	25	30
Ser Ser Gln His His Gly Leu Asn Thr His Trp Ala Pro Thr Leu Gly			
	35	40	45
Pro Gly Trp Gly Met Trp Gly Gln Glu Ala Ala Gln Ser Gly Arg Gln			
	50	55	60
Arg Glu Lys Cys Val Gln Arg Ala Pro Ile Ser Gly Cys Asn Val Val			
65	70	75	80
Leu Arg Leu Trp Leu Gly Ser Ala Ser Arg Val Ser Tyr Val Leu Cys			
	85	90	95
Ser Tyr Phe Leu Ser Pro Thr Leu Pro Cys Arg Asn Pro Ser Glu Tyr			
	100	105	110
Val Ala Thr Ile Leu Glu Leu Ser Ala Leu Ile Val			
	115	120	

<210> 6199

<211> 1777

<212> DNA

<213> Homo sapiens

<400> 6199

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 120
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1777

<210> 6200

<211> 164

<212> PRT

<213> Homo sapiens

<400> 6200

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			20					25					30		
Pro	Pro	Lys	Pro	Asp	Cys	Gln	Gln	Lys	Pro	Ser	Pro	Ser	Glu	Gly	Gln
		35				40					45				
Val	Gly	Val	Pro	Xaa	Arg	Ser	Pro	His	Pro	Gln	Gly	Gly	Phe	Thr	His
	50				55					60					
Cys	Pro	Val	Pro	Gly	Met	Pro	Gly	Gly	Arg	Pro	Leu	Cys	Cys	Cys	His
65				70				75			80				
Cys	Cys	Gln	His	Cys	Pro	Ala	Cys	Glu	Ala	Arg	Arg	Ser	Pro	Cys	Pro
			85					90					95		
Thr	Arg	Cys	Cys	Cys	Ser	Ser	Asp	Pro	Cys	Cys	Glu	Glu	Trp	Asp	Ser
			100				105						110		
Trp	Ser	Lys	Lys	Leu	Val	Phe	Leu	Phe	Cys	Ile	Asn	Glu	Lys	Asn	Pro
		115				120						125			
Gly	Glu	Ala	Ala	Thr	Leu	Pro	Ser	Gln	Arg	Asp	Ala	Leu	Pro	Cys	Phe
	130				135						140				
Gly	Val	Leu	Ser	Pro	Phe	Pro	Pro	Leu	Val	Gln	Gly	Gln	Pro	Ser	Arg

145
Ser Ser Trp Phe

150

155

160

<210> 6201

<211> 604

<212> DNA

<213> Homo sapiens

<400> 6201

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120

ccaggacaag accagccctg atgggagaag ccaggaggacc cagaggaact tccaggaggc
180

ccttagctcc ctacagacaga atgcgggatc gcaatgccca gcaaagggca attcaaggac
240

agtggacgct ggggagagga gcagagtggg cagctctcag gagggcagga ctgcgaggct
300

gcagggagga gttcgggtggg aaggggacagc ctacagagcct aagctgcgcc tcctgggaaa
360

ggggatatgac tggcaggcac acaaattgtct ctcaaggaag gtgggcctgg ggccacagag
420

ctcccagagg agggagtgga gagggagagc ccgcagagga gagaccaggc agggctggcg
480

atcacgcagg tgcacagggt gaacgtcagg actgaaacgg aagacaatgt ccccatgcaa
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gactggctga aacgaactca cacagaattt ttaagaggct cctgtgttgg gtgaaaaccg
600

gccg

604

<210> 6202

<211> 124

<212> PRT

<213> Homo sapiens

<400> 6202

Met Gly Glu Ala Arg Gly Pro Arg Gly Thr Ser Arg Arg Pro Leu Ala
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Pro Ser Asp Arg Met Arg Asp Arg Asn Ala Gln Gln Arg Ala Ile Gln
20 25 30

Gly Gln Trp Thr Leu Gly Arg Gly Ala Glu Trp Ala Ala Leu Arg Arg
35 40 45

Ala Gly Leu Arg Gly Cys Arg Glu Glu Phe Gly Gly Lys Gly Gln Pro
50 55 60

Gln Ser Leu Ser Cys Ala Ser Trp Glu Arg Gly Met Thr Gly Arg His
65 70 75 80

Thr Asn Val Ser Gln Gly Arg Trp Ala Trp Gly His Arg Ala Pro Arg
85 90 95

Gly Gly Ser Gly Glu Gly Glu Pro Ala Glu Glu Arg Pro Gly Arg Ala
100 105 110

Gly Asp His Ala Gly Ala Gln Gly Glu Arg Gln Asp

115

120

<210> 6203

<211> 3462

<212> DNA

<213> Homo sapiens

<400> 6203

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 3360
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 3462

<210> 6204

<211> 486

<212> PRT

<213> Homo sapiens

<400> 6204

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			20					25					30		
Asp	Gly	His	Arg	Leu	Cys	Ser	Asp	Leu	Met	Asn	Cys	Leu	His	Glu	Arg
		35					40					45			
Ala	Arg	Ile	Glu	Lys	Ala	Tyr	Ala	Gln	Gln	Leu	Thr	Glu	Trp	Ala	Arg
		50				55					60				
Arg	Trp	Arg	Gln	Leu	Val	Glu	Lys	Gly	Pro	Gln	Tyr	Gly	Thr	Val	Glu
65					70					75				80	
Lys	Ala	Trp	Met	Ala	Phe	Met	Ser	Glu	Ala	Glu	Arg	Val	Ser	Glu	Leu
			85					90					95		
His	Leu	Glu	Val	Lys	Ala	Ser	Leu	Met	Asn	Asp	Asp	Phe	Glu	Lys	Ile
		100						105					110		
Lys	Asn	Trp	Gln	Lys	Glu	Ala	Phe	His	Lys	Gln	Met	Met	Gly	Gly	Phe
		115					120					125			
Lys	Glu	Thr	Lys	Glu	Ala	Glu	Asp	Gly	Phe	Arg	Lys	Ala	Gln	Lys	Pro
		130				135					140				
Trp	Ala	Lys	Lys	Leu	Lys	Glu	Val	Glu	Ala	Ala	Lys	Lys	Ala	His	His
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Ala	Ala	Cys	Lys	Glu	Lys	Leu	Ala	Ile	Ser	Arg	Glu	Ala	Asn	Ser	
			165					170					175		
Lys	Ala	Asp	Pro	Ser	Leu	Asn	Pro	Glu	Gln	Leu	Lys	Lys	Leu	Gln	Asp
		180						185					190		
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Glu	Lys	Ser	Leu	Lys	Glu	Leu	Asp	Gln	Gly	Thr	Pro	Gln	Tyr	Met	Glu
		210				215					220				
Asn	Met	Glu	Gln	Val	Phe	Glu	Gln	Cys	Gln	Gln	Phe	Glu	Glu	Lys	Arg
225					230					235				240	
Leu	Arg	Phe	Phe	Arg	Glu	Val	Leu	Leu	Glu	Val	Gln	Lys	His	Leu	Asp

245 250 255
 Leu Ser Asn Val Ala Gly Tyr Lys Ala Ile Tyr His Asp Leu Glu Gln
 260 265 270
 Ser Ile Arg Ala Ala Asp Ala Val Glu Asp Leu Arg Trp Phe Arg Ala
 275 280 285
 Asn His Gly Pro Gly Met Ala Met Asn Trp Pro Gln Phe Glu Glu Trp
 290 295 300
 Ser Ala Asp Leu Asn Arg Thr Leu Ser Arg Arg Glu Lys Lys Lys Ala
 305 310 315 320
 Thr Asp Gly Val Thr Leu Thr Gly Ile Asn Gln Thr Gly Asp Gln Ser
 325 330 335
 Leu Pro Ser Lys Pro Ser Ser Thr Leu Asn Val Pro Ser Asn Pro Ala
 340 345 350
 Gln Ser Ala Gln Ser Gln Ser Ser Tyr Asn Pro Phe Glu Asp Glu Asp
 355 360 365
 Asp Thr Gly Ser Thr Val Ser Glu Lys Asp Asp Thr Lys Ala Lys Asn
 370 375 380
 Val Ser Ser Tyr Glu Lys Thr Gln Ser Tyr Pro Thr Asp Trp Ser Asp
 385 390 395 400
 Asp Glu Ser Asn Asn Pro Phe Ser Ser Thr Asp Ala Asn Gly Asp Ser
 405 410 415
 Asn Pro Phe Asp Asp Asp Ala Thr Ser Gly Thr Glu Val Arg Val Arg
 420 425 430
 Ala Leu Tyr Asp Tyr Glu Gly Gln Glu His Asp Glu Leu Ser Phe Lys
 435 440 445
 Ala Gly Asp Glu Leu Thr Lys Met Glu Asp Glu Asp Glu Gln Gly Trp
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 Cys Lys Gly Arg Leu Asp Asn Gly Gln Val Gly Leu Tyr Pro Ala Asn
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 Tyr Val Glu Ala Ile Gln
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<210> 6205

<211> 926

<212> DNA

<213> Homo sapiens

<400> 6205

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180

ttcaatacag tggcccaaga gctactgcag agaagcgacg aggagggcca ggctctacng

240

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300

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360

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420

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480

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<211> 92

<212> PRT

<213> Homo sapiens

<400> 6206

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			20					25					30		
Arg	Glu	Gly	Lys	Glu	Phe	Ala	Asp	Ser	Gln	Lys	Leu	Leu	Phe	Met	Glu
		35					40					45			
Thr	Ser	Ala	Lys	Leu	Asn	His	Gln	Val	Ser	Glu	Val	Phe	Asn	Thr	Val
	50					55					60				
Ala	Gln	Glu	Leu	Leu	Gln	Arg	Ser	Asp	Glu	Glu	Gly	Gln	Ala	Leu	Xaa
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<210> 6207

<211> 1384

<212> DNA

<213> Homo sapiens

<400> 6207

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<210> 6208

<211> 290

<212> PRT

<213> Homo sapiens

<400> 6208

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		20						25					30		
Ser	Ala	Gly	Leu	Ser	Leu	Val	Gly	Leu	Leu	Thr	Leu	Gly	Ala	Val	Leu
		35					40					45			
Ser	Ala	Ala	Ala	Thr	Val	Arg	Glu	Ala	Gln	Gly	Leu	Met	Ala	Gly	Gly
		50				55				60					
Phe	Leu	Cys	Phe	Ser	Leu	Ala	Phe	Xaa	Ala	Gln	Val	Gln	Val	Val	Phe
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<210> 6209
<211> 2269
<212> DNA
<213> Homo sapiens
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<210> 6210

<211> 165

<212> PRT

<213> Homo sapiens

<400> 6210

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			20					25					30		
Ser	Pro	Ser	Leu	Arg	Gly	Thr	His	Leu	Leu	Phe	Leu	Pro	Gln	Ala	Asp
		35				40					45				
Val	Val	Asp	Glu	Ala	Ile	Asp	Ser	Leu	Ala	Arg	Thr	Lys	Gly	Val	Met
	50					55					60				
Lys	Pro	Pro	Cys	Ser	Glu	Gly	Ser	Pro	Trp	Arg	Cys	Pro	His	Phe	Thr
65					70					75				80	
Cys	Trp	Val	Leu	Gln	Ala	Arg	Lys	Pro	Gly	Ser	Gly	Gly	Thr	Arg	Glu
			85					90						95	
Arg	Gln	Ala	Cys	Val	Trp	Thr	Ser	Ala	Gly	Ala	Ala	Ala	Leu	Arg	Leu
			100					105					110		
Ala	Arg	Glu	Arg	Gln	Arg	Trp	Val	Phe	Arg	Phe	His	Ala	Tyr	Val	Trp
		115					120					125			
Ala	His	Ser	Gln	His	Gly	Arg	Val	Ser	Ala	Val	Leu	Val	Leu	Thr	Leu
	130					135					140				
Pro	Glu	Gln	Gln	Trp	Thr	Asp	Glu	Ile	Arg	Leu	Phe	Gln	Lys	Gln	Arg
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<210> 6211

<211> 2163

<212> DNA

<213> Homo sapiens

<400> 6211

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420
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2160

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2163

<210> 6212

<211> 209

<212> PRT

<213> Homo sapiens

<400> 6212

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 20 25 30
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 35 40 45
 Ala Phe Glu Gly Ser Tyr Leu Glu Asp Thr Gln Met Tyr Gly Asn Ile
 50 55 60
 Ile Arg Gly Trp Xaa Ser Val Ser Asp Gln Pro Xaa Lys Asn Ser Asn
 65 70 75 80
 Ser Lys Asn Asp Arg Arg Asn Arg Lys Phe Lys Glu Ala Glu Arg Leu
 85 90 95
 Phe Ser Lys Ser Ser Val Thr Ser Ala Ala Ala Val Ser Ala Leu Ala
 100 105 110
 Gly Val Gln Asp Gln Leu Ile Glu Lys Arg Glu Pro Gly Ser Gly Thr
 115 120 125
 Glu Ser Asp Thr Ser Pro Asp Phe His Asn Gln Glu Asn Glu Pro Ser
 130 135 140
 Gln Glu Asp Pro Glu Asp Leu Asp Gly Ser Val Gln Gly Val Lys Pro
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 Gln Lys Ala Ala Ser Ser Thr Ser Ser Gly Ser His His Ser Ser His
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<210> 6213

<211> 1160

<212> DNA

<213> Homo sapiens

<400> 6213

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<211> 101

<212> PRT

<213> Homo sapiens

<400> 6214

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 35 40 45
 Pro Pro Pro Pro Pro Thr Pro Pro Pro Thr Cys Ile Ala Gln Ile Gln
 50 55 60
 Val Met Met Glu Gln Ile Arg Pro Trp His Ser Arg Met Lys Arg Arg
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 <211> 651
 <212> DNA
 <213> Homo sapiens

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<210> 6216
 <211> 87
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Leu Gln Glu Ser Asp Ala Ala Pro Leu Pro Leu Ser Cys His Leu Ala
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<210> 6217
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 <212> DNA
 <213> Homo sapiens

<400> 6217

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<212> PRT

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<211> 944

<212> DNA

<213> Homo sapiens

<400> 6223

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<213> Homo sapiens

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<210> 6226

<211> 246

<212> PRT

<213> Homo sapiens

<400> 6226

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Gln	Gly	Asp	Phe	Ile	Lys	Cys	Val	Glu	Gln	Lys	Thr	Asp	Ala	Leu	Gly
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Gln	Ile	Trp	Gln	Gln	Tyr	Phe	Ala	Ala	Lys	Asp	Thr	Val	Tyr	Ala	Val
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Pro	Thr	Phe	Leu	Cys	Ala	Leu	Pro	Arg	Arg	Glu	Gly	Tyr	Glu	Phe	Phe
		115					120					125			
Val	Gly	Gln	Trp	Thr	Gly	Thr	Glu	Leu	His	Phe	Thr	Ala	Leu	Ile	Asn
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Tyr	Pro	Glu	Leu	Lys	Glu	Glu	Lys	Gly	Ile	Val	Leu	Met	Thr	Ala	Glu
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		180					185					190			
Gln	Val	Gln	Leu	Phe	Tyr	Ala	Thr	Asp	Arg	Lys	Glu	Thr	Tyr	Gly	Leu
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Val	Glu	Thr	Phe	Asn	Leu	Arg	Pro	Asn	Glu	Phe	Lys	Tyr	Met	Ser	Val
	210				215						220				
Ile	Ala	Glu	Leu	Glu	Gln	Ser	Gly	Leu	Gly	Ala	Glu	Leu	Lys	Cys	Ala
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245

<210> 6227

<211> 830

<212> DNA

<213> Homo sapiens

<400> 6227

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 720
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<210> 6228

<211> 271

<212> PRT

<213> Homo sapiens

<400> 6228

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 20 25 30
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 35 40 45
 Ile Pro Ser Gly Thr Ile Leu Lys Ala Leu Met Glu Gly Gly Glu Asn
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 Gly Pro Trp Met Arg Phe Met Arg Ala Glu Ile Thr Ala Glu Gly Phe
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<210> 6229
<211> 3105
<212> DNA
<213> Homo sapiens
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<400> 6229
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240
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720

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<210> 6230

<211> 944

<212> PRT

<213> Homo sapiens

<400> 6230

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			20					25					30		
Ser	Leu	Val	Ser	Ala	Leu	Asp	Ser	Met	Cys	Ser	Ala	Leu	Ser	Lys	Leu
		35					40					45			
Asn	Ala	Glu	Val	Ala	Cys	Val	Ala	Val	His	Asp	Glu	Ser	Ala	Phe	Val
	50					55				60					
Val	Gly	Thr	Glu	Lys	Gly	Arg	Met	Phe	Leu	Asn	Ala	Arg	Lys	Glu	Leu
65				70					75					80	
Gln	Ser	Asp	Phe	Leu	Arg	Phe	Cys	Arg	Gly	Pro	Pro	Trp	Lys	Asp	Pro
			85						90					95	
Glu	Ala	Glu	His	Pro	Lys	Lys	Val	Gln	Arg	Gly	Glu	Gly	Gly	Gly	Arg
			100					105					110		
Ser	Leu	Pro	Arg	Ser	Ser	Leu	Glu	His	Gly	Ser	Asp	Val	Tyr	Leu	Leu
		115					120					125			
Arg	Lys	Met	Val	Glu	Glu	Val	Phe	Asp	Val	Leu	Tyr	Ser	Glu	Ala	Leu
	130					135					140				
Gly	Arg	Ala	Ser	Val	Val	Pro	Leu	Pro	Tyr	Glu	Arg	Leu	Leu	Arg	Glu
145				150					155					160	
Pro	Gly	Leu	Leu	Ala	Val	Gln	Gly	Leu	Pro	Glu	Gly	Leu	Ala	Phe	Arg

5414

595	600	605
Gly Ile Ser Leu Arg Arg	Pro Asn Cys Phe Gly	Ile Ala Lys Leu Arg
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Lys Ile Leu Glu Ala Ser	Asn Ser Ile Gln Phe	Val Ile Lys Arg Pro
625	630	635
Glu Leu Leu Thr Glu Gly	Val Lys Glu Pro Ile	Val Asp Ser Gln Glu
645	650	655
Arg Asp Ser Gly Asp Pro	Leu Val Asp Glu Ser	Leu Lys Arg Gln Gly
660	665	670
Phe Gln Glu Asn Tyr Asp	Ala Arg Leu Ser Arg	Ile Asp Ile Ala Asn
675	680	685
Thr Leu Arg Glu Gln Val	Gln Asp Leu Phe Asn	Lys Lys Tyr Gly Glu
690	695	700
Ala Leu Gly Ile Lys Tyr	Pro Val Gln Val Pro	Tyr Lys Arg Ile Lys
705	710	715
Ser Asn Pro Gly Ser Val	Ile Ile Glu Gly Leu	Pro Pro Gly Ile Pro
725	730	735
Phe Arg Lys Pro Cys Thr	Phe Gly Ser Gln Asn	Leu Glu Arg Ile Leu
740	745	750
Ala Val Ala Asp Lys Ile	Lys Phe Thr Val Thr	Arg Pro Phe Gln Gly
755	760	765
Leu Ile Pro Lys Pro Asp	Glu Asp Asp Ala Asn	Arg Leu Gly Glu Lys
770	775	780
Val Ile Leu Arg Glu Gln	Val Lys Glu Leu Phe	Asn Glu Lys Tyr Gly
785	790	795
Glu Ala Leu Gly Leu Asn	Arg Pro Val Leu Val	Pro Tyr Lys Leu Ile
805	810	815
Arg Asp Ser Pro Asp Ala	Val Glu Val Thr Gly	Leu Pro Asp Asp Ile
820	825	830
Pro Phe Arg Asn Pro Asn	Thr Tyr Asp Ile His	Arg Leu Glu Lys Ile
835	840	845
Leu Lys Ala Arg Glu His	Val Arg Met Val Ile	Ile Asn Gln Leu Gln
850	855	860
Pro Phe Ala Glu Ile Cys	Asn Asp Ala Lys Val	Pro Ala Lys Asp Ser
865	870	875
Ser Ile Pro Lys Arg Lys	Arg Lys Arg Val Ser	Glu Gly Asn Ser Val
885	890	895
Ser Ser Ser Ser Ser Ser	Ser Ser Ser Ser Ser	Asn Pro Asp Ser
900	905	910
Val Ala Ser Ala Asn Gln	Ile Ser Leu Val Gln	Trp Pro Met Tyr Met
915	920	925
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<210> 6231

<211> 471

<212> DNA

<213> Homo sapiens

<400> 6231

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120

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<210> 6232

<211> 138

<212> PRT

<213> Homo sapiens

<400> 6232

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 Lys Lys Ser Met Leu Gly Gln Lys Ser Gly Pro Ser Gly Leu Leu Thr
 35 40 45
 Trp Arg Arg Lys Arg Gly Pro Lys Pro Pro Val Ala Pro Ile Ser Ile
 50 55 60
 Trp Asn Gly Thr Thr Pro Arg Gly Glu Pro Pro Pro Asn His Ser Ser
 65 70 75 80
 Lys Lys Gly Thr Lys Lys Trp Ala Leu Asp Phe Ser Thr Pro Glu Thr
 85 90 95
 Gln Phe Pro Pro Pro Gly Arg Pro Phe Leu Gly Ile Pro Thr Trp Asp
 100 105 110
 Pro Thr Trp Ala Tyr Ser Gly Pro Tyr Leu Phe Leu Val Gly Ile Gly
 115 120 125
 Ile Pro Phe Pro Phe Pro Pro Pro Ser Asn
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<210> 6233

<211> 894

<212> DNA

<213> Homo sapiens

<400> 6233

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 120
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 180
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 240
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<211> 230

<212> PRT

<213> Homo sapiens

<400> 6234

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			20					25					30		
Glu	Ala	Leu	Met	Leu	Arg	Asp	Gly	Arg	Phe	Ala	Cys	Ala	Ile	Cys	Pro
		35					40					45			
His	Arg	Pro	Val	Leu	Asp	Thr	Leu	Ala	Met	Leu	Thr	Ala	His	Arg	Ala
		50				55					60				
Gly	Lys	Lys	His	Leu	Ser	Ser	Leu	Gln	Leu	Phe	Tyr	Gly	Lys	Lys	Gln
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Pro	Gly	Lys	Glu	Arg	Lys	Gln	Asn	Pro	Lys	His	Gln	Asn	Glu	Leu	Arg
			85					90					95		
Arg	Glu	Glu	Thr	Lys	Ala	Glu	Ala	Pro	Leu	Leu	Thr	Gln	Thr	Arg	Leu
			100					105					110		
Ile	Thr	Gln	Ser	Ala	Leu	His	Arg	Ala	Pro	His	Tyr	Asn	Ser	Cys	Cys
		115					120					125			
Arg	Arg	Lys	Tyr	Arg	Pro	Glu	Ala	Pro	Gly	Pro	Ser	Val	Ser	Leu	Ser
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Pro	Met	Pro	Pro	Ser	Glu	Val	Lys	Leu	Gln	Ser	Gly	Lys	Ile	Ser	Arg
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Tyr	Leu	Thr	Leu	Arg	Ser	Ser	Gly	Trp	Ile	Pro	Asp	Gly	Arg	Gly	Arg
		195					200					205			
Trp	Val	Lys	Asp	Glu	Asn	Val	Glu	Phe	Asp	Ser	Asp	Glu	Glu	Glu	Pro

210 215 220
Pro Asp Leu Pro Leu Asp
225 230

<210> 6235
<211> 3427
<212> DNA
<213> Homo sapiens

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<210> 6236

<211> 820

<212> PRT

<213> Homo sapiens

<400> 6236

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Pro	Glu	Gly	Gly	Leu	Pro	Gly	Pro	Trp	Ala	Leu	His	Arg	Gly	Arg	Lys
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Lys	Ala	Thr	Gly	Ser	Pro	Val	Ser	Ile	Phe	Val	Tyr	Asp	Val	Lys	Pro
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Gly	Ala	Glu	Glu	Gln	Thr	Gln	Val	Ala	Lys	Ala	Ala	Phe	Lys	Arg	Phe
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Lys	Thr	Leu	Arg	His	Pro	Asn	Ile	Leu	Ala	Tyr	Ile	Asp	Gly	Leu	Glu
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Thr	Glu	Lys	Cys	Leu	His	Val	Val	Thr	Glu	Ala	Val	Thr	Pro	Leu	Gly
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Ile	Tyr	Leu	Lys	Ala	Arg	Val	Glu	Ala	Gly	Gly	Leu	Lys	Glu	Leu	Glu
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Ile	Ser	Trp	Gly	Leu	His	Gln	Ile	Val	Lys	Ala	Leu	Ser	Phe	Leu	Val
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Val	Asp	Arg	Ala	Gly	Glu	Trp	Lys	Leu	Gly	Gly	Leu	Asp	Tyr	Met	Tyr
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Ser	Ala	Gln	Gly	Asn	Gly	Gly	Gly	Pro	Pro	Arg	Lys	Gly	Ile	Pro	Glu
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Leu	Glu	Gln	Tyr	Asp	Pro	Pro	Glu	Leu	Ala	Asp	Ser	Ser	Gly	Arg	Val
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Val	Arg	Glu	Lys	Trp	Ser	Ala	Asp	Met	Trp	Arg	Leu	Gly	Cys	Leu	Ile
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Trp	Glu	Val	Phe	Asn	Gly	Pro	Leu	Pro	Arg	Ala	Ala	Ala	Leu	Arg	Asn

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Pro	Gly	Lys	Ile	Pro	Lys	Thr	Leu	Val	Pro	His	Tyr	Cys	Glu	Leu
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Gly	Ala	Asn	Pro	Lys	Val	Arg	Pro	Asn	Pro	Ala	Arg	Phe	Leu	Gln
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Cys	Arg	Ala	Pro	Gly	Gly	Phe	Met	Ser	Asn	Arg	Phe	Val	Glu	Thr
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Leu	Phe	Leu	Glu	Glu	Ile	Gln	Ile	Lys	Glu	Pro	Ala	Glu	Lys	Gln
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Phe	Phe	Gln	Glu	Leu	Ser	Lys	Ser	Leu	Asp	Ala	Phe	Pro	Glu	Asp
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Cys	Arg	His	Lys	Val	Leu	Pro	Gln	Leu	Leu	Thr	Ala	Phe	Glu	Phe
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Asn	Ala	Gly	Ala	Val	Val	Leu	Thr	Pro	Leu	Phe	Lys	Val	Gly	Lys
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Leu	Ser	Ala	Glu	Glu	Tyr	Gln	Gln	Lys	Ile	Ile	Pro	Val	Val	Val
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Met	Phe	Ser	Ser	Thr	Asp	Arg	Ala	Met	Arg	Ile	Arg	Leu	Leu	Gln
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Ile	Phe	Pro	His	Val	Val	His	Gly	Phe	Leu	Asp	Thr	Asn	Pro	Ala
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Arg	Glu	Gln	Thr	Val	Lys	Ser	Met	Leu	Leu	Leu	Ala	Pro	Lys	Leu
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Glu	Ala	Asn	Leu	Asn	Val	Glu	Leu	Met	Lys	His	Phe	Ala	Arg	Leu
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Ala	Lys	Asp	Glu	Gln	Gly	Pro	Ile	Arg	Cys	Asn	Thr	Thr	Val	Cys
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Gly	Lys	Ile	Gly	Ser	Tyr	Leu	Ser	Ala	Ser	Thr	Arg	His	Arg	Val
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Thr	Ser	Ala	Phe	Ser	Arg	Ala	Thr	Arg	Asp	Pro	Phe	Ala	Pro	Ser
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Val	Ala	Gly	Val	Leu	Gly	Phe	Ala	Ala	Thr	His	Asn	Leu	Tyr	Ser
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Asn	Asp	Cys	Ala	Gln	Lys	Ile	Leu	Pro	Val	Leu	Cys	Gly	Leu	Thr
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Asp	Pro	Glu	Lys	Ser	Val	Arg	Asp	Gln	Ala	Phe	Lys	Ala	Ile	Arg
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Phe	Leu	Ser	Lys	Leu	Glu	Ser	Val	Ser	Glu	Asp	Pro	Thr	Gln	Leu
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Glu	Val	Glu	Lys	Asp	Val	His	Ala	Ala	Ser	Ser	Pro	Gly	Met	Gly
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Thr	Ser	Lys	Leu	Ile	Arg	Ser	His	Pro	Thr	Thr	Ala	Pro	Thr	Glu
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Asn	Ile	Pro	Gln	Arg	Pro	Thr	Pro	Glu	Gly	Val	Pro	Ala	Pro	Ala
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Thr	Pro	Val	Pro	Ala	Thr	Pro	Thr	Thr	Ser	Gly	His	Trp	Glu	Thr
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Glu	Glu	Asp	Lys	Asp	Thr	Ala	Glu	Asp	Ser	Ser	Thr	Ala	Asp	Arg
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Ala Gln Gln Asp Asp Trp Ser Thr Gly Gly Gln Val Ser Arg Ala Ser		
675	680	685
Gln Val Ser Asn Ser Asp His Lys Ser Ser Lys Ser Pro Glu Ser Asp		
690	695	700
Trp Ser Ser Trp Glu Ala Glu Gly Ser Trp Glu Gln Gly Trp Gln Glu		
705	710	715
Pro Ser Ser Gln Glu Pro Pro Pro Asp Gly Thr Arg Leu Ala Ser Glu		
725	730	735
Tyr Asn Trp Gly Gly Pro Glu Ser Ser Asp Lys Gly Asp Pro Phe Ala		
740	745	750
Thr Leu Ser Ala Arg Pro Ser Thr Gln Pro Arg Pro Asp Ser Trp Gly		
755	760	765
Glu Asp Asn Trp Glu Gly Leu Glu Thr Asp Ser Arg Gln Val Lys Ala		
770	775	780
Glu Leu Ala Arg Lys Lys Arg Glu Glu Arg Arg Glu Met Glu Ala		
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Arg Lys Leu Asp		
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<210> 6237

<211> 494

<212> DNA

<213> Homo sapiens

<400> 6237

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<210> 6238

<211> 141

<212> PRT

<213> Homo sapiens

<400> 6238

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Ser Thr Pro Lys Asn Gly Met Ser Ser Lys Ser Arg Lys Arg Ile Met			
35	40	45	
Pro Asp Pro Val Thr Glu Pro Pro Val Thr Asp Pro Val Tyr Glu Ala			
50	55	60	
Leu Leu Tyr Cys Asn Ile Pro Ser Val Ala Glu Arg Ser Met Glu Gly			
65	70	75	80
His Ala Pro His His Phe Lys Leu Val Ser Val His Val Phe Ile Arg			
85	90	95	
His Gly Asp Arg Tyr Pro Leu Tyr Val Ile Pro Lys Thr Lys Arg Pro			
100	105	110	
Glu Ile Asp Cys Thr Leu Val Ala Asn Arg Lys Pro Tyr His Pro Lys			
115	120	125	
Leu Glu Ala Phe Ile Ser His Met Leu Arg Gly Ser Gly			
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<210> 6239

<211> 911

<212> DNA

<213> Homo sapiens

<400> 6239

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<210> 6240

<211> 235

<212> PRT

<213> Homo sapiens

<400> 6240

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Leu Glu Leu Leu Ser Pro Phe Gln Leu Tyr Phe Asn Pro His Leu Val
      35           40           45
Phe Arg Lys Phe Gln Val Trp Arg Leu Val Thr Asn Phe Leu Phe Phe
      50           55           60
Gly Pro Leu Gly Phe Ser Phe Phe Phe Asn Met Leu Phe Val Phe Arg
      65           70           75           80
Tyr Cys Arg Met Leu Glu Glu Gly Ser Phe Arg Gly Arg Thr Ala Asp
      85           90           95
Phe Val Phe Met Phe Leu Phe Gly Gly Val Leu Met Thr Leu Leu Gly
      100          105          110
Leu Leu Gly Ser Leu Phe Phe Leu Gly Gln Ala Leu Met Ala Met Leu
      115          120          125
Val Tyr Val Trp Ser Arg Arg Ser Pro Arg Val Arg Val Asn Phe Phe
      130          135          140
Gly Leu Leu Thr Phe Gln Ala Pro Phe Leu Pro Trp Ala Leu Met Gly
      145          150          155          160
Phe Ser Leu Leu Leu Gly Asn Ser Ile Leu Val Asp Leu Leu Gly Ile
      165          170          175
Ala Val Gly His Ile Tyr Tyr Phe Leu Glu Asp Val Phe Pro Asn Gln
      180          185          190
Pro Gly Gly Lys Arg Leu Leu Gln Thr Pro Gly Phe Leu Lys Leu Leu
      195          200          205
Leu Asp Ala Pro Ala Glu Asp Pro Asn Tyr Leu Pro Leu Pro Glu Glu
      210          215          220
Gln Pro Gly Pro His Leu Pro Pro Pro Gln Gln
      225          230          235

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<210> 6241

<211> 1515

<212> DNA

<213> Homo sapiens

<400> 6241

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240

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<210> 6242

<211> 245

<212> PRT

<213> Homo sapiens

<400> 6242

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 Lys Pro Arg Leu Arg Arg Ser Ser Arg Arg Ala Pro Gly Gly Gly Pro
 35 40 45
 Gly Glu Pro Pro Pro Pro Glu Leu Ala Leu Leu Pro Pro Pro Pro Pro
 50 55 60
 Pro Pro Pro Thr Pro Ala Thr Pro Thr Ser Ser Ala Ser Asn Leu Asp
 65 70 75 80
 Leu Gly Glu Gln Arg Asp Ala Trp Glu Thr Phe Gln Lys Arg Gln Lys
 85 90 95
 Leu Thr Ser Glu Gly Ala Ala Lys Leu Leu Leu Asp Thr Phe Glu Tyr
 100 105 110
 Gln Gly Leu Val Lys His Thr Gly Gly Cys His Cys Gly Ala Val Arg
 115 120 125
 Phe Glu Val Trp Ala Ser Ala Asp Leu His Ile Phe Asp Cys Asn Cys
 130 135 140
 Ser Ile Cys Lys Lys Lys Gln Asn Arg His Phe Ile Val Pro Ala Ser
 145 150 155 160
 Arg Phe Lys Leu Leu Lys Gly Ala Glu His Ile Thr Thr Tyr Thr Phe
 165 170 175
 Asn Thr His Lys Ala Gln His Thr Phe Cys Lys Arg Cys Gly Val Gln
 180 185 190
 Ser Phe Tyr Thr Pro Arg Ser Asn Pro Gly Gly Phe Gly Ile Ala Pro
 195 200 205
 His Cys Leu Asp Glu Gly Thr Val Arg Ser Met Val Thr Glu Glu Phe
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 Asn Gly Ser Asp Trp Glu Lys Ala Met Lys Glu His Lys Thr Ile Lys
 225 230 235 240
 Asn Met Ser Lys Glu
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<210> 6243

<211> 326

<212> DNA

<213> Homo sapiens

<400> 6243

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<210> 6244

<211> 104

<212> PRT

<213> Homo sapiens

<400> 6244

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 Gly Phe Leu Leu Trp Lys Ala Ile Pro Ser Phe Ala Ser Ser Thr Leu
 35 40 45
 Arg Met Ser Ser Ser Leu His Ser Leu Trp Phe Val Pro Leu Val Ser
 50 55 60
 Glu Glu Glu Val Leu Ile Ile Leu Ser Gly Ser Glu Cys Ser Thr Cys
 65 70 75 80
 Pro Tyr Val Leu Ser Tyr Pro Thr Ser Ser Leu Thr Leu Phe His Gln
 85 90 95
 Phe Leu Ser Phe Ser Pro Trp Arg
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<210> 6245

<211> 6609

<212> DNA

<213> Homo sapiens

<400> 6245

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<210> 6246

<211> 1286

<212> PRT

<213> Homo sapiens

<400> 6246

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Lys	Ile	Ser	His	Gln	Asp	His	Ser	Asp	Lys	Asn	Arg	Leu	Leu	Glu	Leu
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<212> DNA

<213> Homo sapiens

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<210> 6250

<211> 245

<212> PRT

<213> Homo sapiens

<400> 6250

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 Tyr Pro Gly Ile Gln Thr Arg Val Leu Asp Val Thr Lys Lys Lys Gln
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 Ile Asp Gln Phe Ala Asn Glu Val Glu Arg Leu Asp Val Leu Phe Asn
 65 70 75 80
 Val Ala Gly Phe Val His His Gly Thr Val Leu Asp Cys Glu Glu Lys
 85 90 95
 Asp Trp Asp Phe Ser Met Asn Leu Asn Val Arg Ser Met Tyr Leu Met
 100 105 110
 Ile Lys Ala Phe Leu Pro Lys Met Leu Ala Gln Lys Ser Gly Asn Ile
 115 120 125
 Ile Asn Met Ser Ser Val Ala Ser Ser Val Lys Gly Val Val Asn Arg
 130 135 140
 Cys Val Tyr Ser Thr Thr Lys Ala Ala Val Ile Gly Leu Thr Lys Ser
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 Val Ala Ala Asp Phe Ile Gln Gln Gly Ile Arg Cys Asn Cys Val Cys

5437

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<211> 100

<212> PRT

<213> Homo sapiens

<400> 6252

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Ala	Lys	Ser	Ser	Lys	Gly	Lys	Gly	Arg	Gly	His	Ser	Gly	Glu	Asn	Ser
		20					25						30		
Ile	Ser	Gly	Lys	Thr	Gly	Ile	His	Phe	Lys	Ile	Ser	Ala	Gln	Lys	Gly
		35				40						45			
Ser	Arg	Ala	Val	Leu	Lys	Pro	Gly	Arg	Gln	Gly	Pro	Pro	Ile	Pro	Thr
	50				55				60						
Ile	Leu	Leu	Ser	Pro	Ser	Pro	Pro	Trp	Arg	Thr	Leu	Ala	Arg	Val	Tyr
65				70				75					80		
Arg	Glu	Ser	His	His	Ile	Tyr	Tyr	Glu	Ala	Arg	Ala	Leu	Gly	Tyr	Val
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<210> 6253

<211> 1953

<212> DNA

<213> Homo sapiens

<400> 6253

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 240

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420
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<210> 6254

<211> 216

<212> PRT

<213> Homo sapiens

<400> 6254

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			20					25					30		
Glu	Ala	Thr	Leu	Gly	Ser	Gly	Asn	Leu	Arg	Gln	Ala	Val	Met	Leu	Pro
		35					40					45			
Glu	Gly	Glu	Asp	Leu	Asn	Glu	Trp	Ile	Ala	Val	Asn	Thr	Val	Asp	Phe
	50					55				60					
Phe	Asn	Gln	Ile	Asn	Met	Leu	Tyr	Gly	Thr	Ile	Thr	Glu	Phe	Cys	Thr
65					70					75				80	
Glu	Ala	Ser	Cys	Pro	Val	Met	Ser	Ala	Gly	Pro	Arg	Tyr	Glu	Tyr	His
			85						90					95	
Trp	Ala	Asp	Gly	Thr	Asn	Ile	Lys	Lys	Pro	Ile	Lys	Cys	Ser	Ala	Pro
			100					105						110	
Lys	Tyr	Ile	Asp	Tyr	Leu	Met	Thr	Trp	Val	Gln	Asp	Gln	Leu	Asp	Asp
		115					120					125			
Glu	Thr	Leu	Phe	Pro	Ser	Lys	Ile	Gly	Val	Pro	Phe	Pro	Lys	Asn	Phe
	130					135					140				
Met	Ser	Val	Ala	Lys	Thr	Ile	Leu	Lys	Arg	Leu	Phe	Arg	Val	Tyr	Ala
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His	Ile	Tyr	His	Gln	His	Phe	Asp	Ser	Val	Met	Gln	Leu	Gln	Glu	Glu
			165						170					175	
Ala	His	Leu	Asn	Thr	Ser	Phe	Lys	His	Phe	Ile	Phe	Phe	Val	Gln	Glu
			180					185					190		
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<210> 6255

<211> 622

<212> DNA

<213> Homo sapiens

<400> 6255

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180
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240

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<210> 6256

<211> 150

<212> PRT

<213> Homo sapiens

<400> 6256

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Lys	Lys	Lys	Ala	Thr	Val	Ala	Ala	Phe	Thr	Ala	Ser	Glu	Gly	His	Ala
			20					25					30		
His	Pro	Arg	Val	Val	Glu	Leu	Pro	Lys	Thr	Asp	Glu	Gly	Leu	Gly	Phe
		35					40					45			
Asn	Ile	Met	Gly	Gly	Lys	Glu	Gln	Asn	Ser	Pro	Ile	Tyr	Ile	Ser	Arg
	50				55					60					
Val	Ile	Pro	Gly	Gly	Val	Ala	Asp	Arg	His	Gly	Gly	Leu	Lys	Arg	Gly
65				70					75					80	
Asp	Gln	Leu	Leu	Ser	Val	Asn	Gly	Val	Ser	Val	Glu	Gly	Glu	Gln	His
			85					90						95	
Glu	Lys	Ala	Val	Glu	Leu	Leu	Lys	Ala	Ala	Gln	Gly	Ser	Val	Lys	Leu
			100					105					110		
Val	Val	Arg	Tyr	Thr	Pro	Arg	Val	Leu	Glu	Glu	Met	Glu	Ala	Arg	Phe
		115					120					125			
Glu	Lys	Met	Arg	Ser	Ala	Arg	Arg	Gln	Gln	His	Gln	Ser	Tyr	Ser	
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<210> 6257

<211> 2216

<212> DNA

<213> Homo sapiens

<400> 6257

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<210> 6258

<211> 340

<212> PRT

<213> Homo sapiens

<400> 6258

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Phe	Gln	Ala	Leu	Gln	Arg	Leu	His	Met	Thr	Ile	Phe	Ser	Gln	Ser	Val
			20					25					30		
Ser	Pro	Cys	Gly	Lys	Phe	Leu	Ala	Ala	Gly	Asn	Asn	Tyr	Gly	Gln	Ile
		35					40					45			
Ala	Ile	Phe	Ser	Leu	Ser	Ser	Ala	Leu	Ser	Ser	Glu	Ala	Lys	Glu	Glu
	50					55					60				
Ser	Lys	Lys	Pro	Val	Val	Thr	Phe	Gln	Ala	His	Asp	Gly	Pro	Val	Tyr
65				70					75					80	
Ser	Met	Val	Ser	Thr	Asp	Arg	His	Leu	Leu	Ser	Ala	Gly	Asp	Gly	Glu
			85					90					95		
Val	Lys	Ala	Trp	Leu	Trp	Ala	Glu	Met	Leu	Lys	Lys	Gly	Cys	Lys	Glu
			100					105					110		
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		115					120					125			
Ile	Asn	Ala	Leu	Leu	Leu	Val	Pro	Lys	Glu	Asn	Ser	Leu	Ile	Leu	Ala
	130					135					140				
Gly	Gly	Asp	Cys	Gln	Leu	His	Thr	Met	Asp	Leu	Glu	Thr	Gly	Thr	Phe
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Thr	Arg	Val	Leu	Arg	Gly	His	Thr	Asp	Tyr	Ile	His	Cys	Leu	Ala	Leu
			165					170					175		
Arg	Glu	Arg	Ser	Pro	Glu	Val	Leu	Ser	Gly	Gly	Glu	Asp	Gly	Ala	Val
			180					185					190		
Arg	Leu	Trp	Asp	Leu	Arg	Thr	Ala	Lys	Glu	Val	Gln	Thr	Ile	Glu	Ser
	195						200					205			
Ile	Ser	Thr	Arg	Ser	Ala	Arg	Gly	Pro	Thr	Met	Gly	Ala	Gly	Leu	Asp
	210					215					220				
Val	Trp	Thr	Asp	Ser	Asp	Trp	Met	Val	Cys	Gly	Gly	Gly	Pro	Ala	Leu
225				230					235					240	
Thr	Leu	Trp	His	Leu	Arg	Ser	Ser	Thr	Pro	Thr	Thr	Ile	Phe	Pro	Ile
			245					250					255		
Arg	Ala	Pro	Gln	Lys	His	Val	Thr	Phe	Tyr	Gln	Asp	Leu	Ile	Leu	Ser

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Lys Ala Gln Val Pro Gly Ser Ser Pro Gly Leu Leu Ser Leu Ser Leu		
290	295	300
Asn Gln Gln Pro Ala Ala Pro Glu Cys Lys Val Leu Thr Ala Ala Gly		
305	310	315
Asn Ser Cys Arg Val Asp Val Phe Thr Asn Leu Gly Tyr Arg Ala Phe		
325	330	335
Ser Leu Ser Phe		
340		

<210> 6259

<211> 384

<212> DNA

<213> Homo sapiens

<400> 6259

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384

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<210> 6260

<211> 128

<212> PRT

<213> Homo sapiens

<400> 6260

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Gln Lys Asn Glu Lys Ile Lys Tyr Ser Arg Phe Ala Ala Thr Asn Thr		
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Arg Val Lys Ala Lys Gln Lys Pro Leu Ile Ser Asn Ser His Thr Asp		
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His Leu Met Gly Cys Thr Lys Ser Ala Glu Pro Gly Thr Glu Thr Ser		
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Gln Val Asn Ser Phe Ser Asp Leu Lys Ala Ser Thr Leu Val His Lys		
85	90	95
Pro Gln Ser Asp Phe Thr Asn Asp Ala Leu Ser Pro Lys Phe Asn Leu		
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115

120

125

<210> 6261

<211> 3619

<212> DNA

<213> Homo sapiens

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<211> 431

<212> PRT

<213> Homo sapiens

<400> 6262

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Lys Asn Lys Glu Leu Gly Ala Val Ser Leu Asp Gly Tyr Phe His Leu		
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Trp Lys Ala Glu Asn Thr Leu Ser Lys Leu Leu Ser Thr Lys Leu Pro		
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275	280	285
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355	360	365
Asn Leu Lys Leu Thr Thr Gly Lys Gly Trp Leu Asn His Asp Glu Thr		
370	375	380
Trp Arg Asn Tyr Phe Ser Asp Ile Asp Phe Phe Pro Asn Ala Val Tyr		
385	390	395
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<211> 2508

<212> DNA

<213> Homo sapiens

<400> 6263

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<211> 654

<212> PRT

<213> Homo sapiens

<400> 6264

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Asn	Asn	Trp	Asp	Leu	Val	Ala	Ala	Ile	Asn	Gly	Val	Ile	Pro	Gln	Glu
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Asn	Gly	Ile	Leu	Gln	Ser	Glu	Tyr	Gly	Gly	Glu	Thr	Ile	Pro	Gly	Pro
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Ala	Phe	Asn	Pro	Ala	Ser	His	Pro	Ala	Ser	Ala	Pro	Thr	Ser	Ser	Ser
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Ser	Ser	Ala	Phe	Arg	Pro	Val	Met	Pro	Ser	Arg	Gln	Ile	Val	Glu	Arg
			85					90					95		
Gln	Pro	Arg	Met	Leu	Asp	Phe	Arg	Val	Glu	Tyr	Arg	Asp	Arg	Asn	Val
			100					105					110		
Asp	Val	Val	Leu	Glu	Asp	Thr	Cys	Thr	Val	Gly	Glu	Ile	Lys	Gln	Ile
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Leu	Glu	Asn	Glu	Leu	Gln	Ile	Pro	Val	Ser	Lys	Met	Leu	Leu	Lys	Gly
	130					135					140				
Trp	Lys	Thr	Gly	Asp	Val	Glu	Asp	Ser	Thr	Val	Leu	Lys	Ser	Leu	His
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Leu	Pro	Lys	Asn	Asn	Ser	Leu	Tyr	Val	Leu	Thr	Pro	Asp	Leu	Pro	Pro
			165					170					175		
Pro	Ser	Ser	Ser	Ser	His	Ala	Gly	Ala	Leu	Gln	Glu	Ser	Leu	Asn	Gln
			180					185					190		
Asn	Phe	Met	Leu	Ile	Ile	Thr	His	Arg	Glu	Val	Gln	Arg	Glu	Tyr	Asn
	195						200					205			
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Pro	Thr	Ser	Ala	Thr	Asp	Asp	Ser	Met	Cys	Leu	Ala	Glu	Ser	Gly	Leu
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Ser	Tyr	Pro	Cys	His	Arg	Leu	Thr	Val	Gly	Arg	Arg	Ser	Ser	Pro	Ala
			260					265					270		
Gln	Thr	Arg	Glu	Gln	Ser	Glu	Glu	Gln	Ile	Thr	Asp	Val	His	Met	Val

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Pro Met Ile Cys Phe Leu Val Pro Glu Asn Ala Glu Asn Glu Gly Asp		
325	330	335
Ala Leu Leu Gln Phe Thr Ala Glu Phe Ser Ser Arg Tyr Gly Asp Cys		
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355	360	365
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370	375	380
His Asp Glu Ser Val Leu Thr Asn Val Phe Cys Ser Gln Met Leu Cys		
385	390	395
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405	410	415
Trp Asp Leu Thr Lys Asp Ser Asn Arg Ala Arg Phe Leu Thr Met Cys		
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Asn Arg His Phe Gly Ser Val Val Ala Gln Thr Ile Arg Thr Gln Lys		
435	440	445
Thr Asp Gln Phe Pro Leu Phe Leu Ile Ile Met Gly Lys Arg Ser Ser		
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Met Met Arg Leu Met Ala Ala Met Glu Ile Phe Thr Ala Gln Gln Gln		
485	490	495
Glu Asp Ile Lys Asp Glu Asp Glu Arg Glu Ala Arg Glu Asn Val Lys		
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Arg Glu Gln Asp Glu Ala Tyr Arg Leu Ser Leu Glu Ala Asp Arg Ala		
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595	600	605
Ser Lys Gly Phe Pro Trp Asp Glu Tyr Lys Leu Leu Ser Thr Phe Pro		
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<211> 1344

<212> DNA

<213> Homo sapiens

<400> 6265

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<210> 6266

<211> 240

<212> PRT

<213> Homo sapiens

<400> 6266

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Ser Pro Asp	Asp Lys Glu Phe Gln Ser	Val Glu Glu Glu Met	Gln Ser
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Thr Val Arg	Glu His Arg Asp Gly	Gly His Ala Gly	Gly Ile Phe Asn
50	55	60	
Arg Tyr Asn	Ile Leu Lys Ile Gln Lys	Val Cys Asn Lys Lys	Leu Trp
65	70	75	80
Glu Arg Tyr	Thr His Arg Arg Lys	Glu Val Ser Glu Glu	Asn His Asn
85	90	95	
His Ala Asn	Glu Arg Met Leu Phe His	Gly Ser Pro Phe Val	Asn Ala
100	105	110	
Ile Ile His	Lys Gly Phe Asp Glu Arg	His Ala Tyr Ile Gly	Gly Met
115	120	125	
Phe Gly Ala	Gly Ile Tyr Phe Ala Glu	Asn Ser Ser Lys Ser	Asn Gln
130	135	140	
Tyr Val Tyr	Gly Ile Gly Gly Gly Thr	Gly Cys Pro Val His	Lys Asp
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Arg Ser Cys	Tyr Ile Cys His Arg Gln	Leu Leu Phe Cys Arg	Val Thr
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Leu Gly Lys	Ser Phe Leu Gln Phe Ser	Ala Met Lys Met Ala	His Ser
180	185	190	
Pro Pro Gly	His His Ser Val Thr Gly	Arg Pro Ser Val Asn	Gly Leu
195	200	205	
Ala Leu Ala	Glu Tyr Val Ile Tyr Arg	Gly Glu Gln Ala Tyr	Pro Glu
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Tyr Leu Ile	Thr Tyr Gln Ile Met Arg	Pro Glu Gly Met Val	Asp Gly
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<210> 6267

<211> 328

<212> DNA

<213> Homo sapiens

<400> 6267

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<210> 6268

<211> 83

<212> PRT

<213> Homo sapiens

<400> 6268

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<210> 6269

<211> 923

<212> DNA

<213> Homo sapiens

<400> 6269

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<212> PRT

<213> Homo sapiens

<400> 6270

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      35           40           45
Asn Phe Val Ser Lys Glu Glu Phe Gln Ala Val Glu Lys Lys Leu Val
      50           55           60
Glu Glu Lys Ala Ala His Ala Lys Thr Lys Val Leu Leu Ala Lys Glu
      65           70           75           80
Glu Glu Lys Leu Gln Phe Ala Leu Gly Glu Val Glu Val Leu Ser Lys
      85           90           95
Gln Leu Glu Lys Glu Lys Leu Ala Phe Glu Lys Ala Leu Ser Ser Val
      100          105          110
Lys Ser Lys Val Leu Gln Glu Ser Ser Lys Lys Asp Gln Leu Ile Thr
      115          120          125
Lys Cys Asn Glu Ile Glu Ser His Ile Ile Lys Gln Glu Asp Ile Leu
      130          135          140
Asn Gly Lys Glu Asn Glu Ile Lys Glu Leu Gln Gln Val Ile Ser Gln
      145          150          155          160
Gln Lys Gln Ile Phe Ser Pro Pro Pro Ala Gly Ser Val Ala Gly Ile
      165          170          175
Thr Cys Leu Thr Ser Gly Ser Arg Ser Ser Arg Lys Ala Thr Trp Pro
      180          185          190
Arg Cys Trp Thr Arg Ser Ile Arg Lys Pro Gln Gly His Val Arg Pro
      195          200          205
Ala Ala Thr Ser Ile Pro Gly Lys Asn Lys Met Ala Ala Ala Phe Leu
      210          215          220
Phe Ser Gly Cys Asn Pro Gln Pro Leu Pro Ser Leu Leu Trp Glu Ser
      225          230          235          240
Pro Ala Ser Ser Pro Cys Tyr Phe Pro Pro Ser Trp Ile Val Val Gly
      245          250          255
Val His Lys Val Gly Ala Cys Ser Leu Gly Glu Glu Leu Gly Leu Cys
      260          265          270
Cys Leu Val Gly Thr Thr Ala Ser Phe Gly Tyr Leu Ile Pro Ser Tyr
      275          280          285
Ile Asn Ser Pro Gly Tyr Pro Val Ile Phe His Pro Thr Pro Ser Val
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<210> 6271

<211> 1437

<212> DNA

<213> Homo sapiens

<400> 6271

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1320
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<210> 6272

<211> 296

<212> PRT

<213> Homo sapiens

<400> 6272

Xaa Met Ala Thr Gly Gly Gln Gln Lys Glu Asn Thr Leu Leu His Leu

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Leu Glu Val Ile Lys Thr Arg Leu Gln Ser Ser Arg Leu Ala Leu Arg
35           40           45
Thr Val Tyr Tyr Pro Gln Val His Leu Gly Thr Ile Ser Gly Ala Gly
50           55           60
Met Val Arg Pro Thr Ser Val Thr Pro Gly Leu Phe Gln Val Leu Lys
65           70           75           80
Ala Val Tyr Phe Ala Cys Tyr Ser Lys Ala Lys Glu Gln Phe Asn Gly
85           90           95
Ile Phe Val Pro Asn Ser Asn Ile Val His Leu Phe Ser Ala Gly Ser
100          105          110
Ala Ala Phe Ile Thr Asn Ser Leu Met Asn Pro Ile Trp Met Val Lys
115          120          125
Thr Arg Met Gln Leu Glu Gln Lys Val Arg Gly Ser Lys Gln Met Asn
130          135          140
Thr Leu Gln Cys Ala Arg Tyr Val Tyr Gln Thr Glu Gly Ile Arg Gly
145          150          155          160
Phe Tyr Arg Gly Leu Thr Ala Ser Tyr Ala Gly Ile Ser Glu Thr Ile
165          170          175
Ile Cys Phe Ala Ile Tyr Glu Ser Leu Lys Lys Tyr Leu Lys Glu Ala
180          185          190
Pro Leu Ala Ser Ser Ala Asn Gly Thr Glu Lys Asn Ser Thr Ser Phe
195          200          205
Phe Gly Leu Met Ala Ala Ala Ala Leu Ser Lys Gly Cys Ala Ser Cys
210          215          220
Ile Ala Tyr Pro His Glu Val Ile Arg Thr Arg Leu Arg Glu Glu Gly
225          230          235          240
Thr Lys Tyr Lys Ser Phe Val Gln Thr Ala Arg Leu Val Phe Arg Glu
245          250          255
Glu Gly Tyr Leu Ala Phe Tyr Arg Gly Leu Phe Ala Gln Leu Ile Arg
260          265          270
Gln Ile Pro Asn Thr Ala Ile Val Leu Ser Thr Tyr Glu Leu Ile Val
275          280          285
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<210> 6273

<211> 2355

<212> DNA

<213> Homo sapiens

<400> 6273

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120

tggactggct caccaaccag ccgcggccgg cagctggtgg acaaggacag caccttcttc
180

agcacgctgg agcaccacct gagccgctac ctgaaggacg tgaagcagca ccacgtcaag
240

gctgacaagc gggacccaga gtttgtcttc tacgaccagc tgaagcaagt gatgaatgcg
300

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<210> 6274

<211> 70

<212> PRT

<213> Homo sapiens

<400> 6274

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		20					25					30			
Ala	Ala	Tyr	Leu	Gly	Met	Ala	Tyr	Val	Ala	Val	Gln	Val	Ser	Ser	Ala
		35				40					45				
Gln	Ala	Gln	His	Phe	Ser	Leu	Leu	Tyr	Lys	Thr	Val	Gln	Arg	Leu	Leu
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<210> 6275

<211> 1534

<212> DNA

<213> Homo sapiens

<400> 6275

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 420

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<210> 6276

<211> 172

<212> PRT

<213> Homo sapiens

<400> 6276

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		20					25					30			
Asp	Asp	Leu	Ser	Asn	Ala	Ala	Arg	Glu	Leu	Arg	Val	Leu	Ile	Asp	Asp
		35				40					45				
Ser	Gln	Ser	Ile	Ile	Phe	Ile	Asn	Leu	Asp	Ser	His	Arg	Asn	Val	Met
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Ile	Arg	Leu	Asn	Leu	Gln	Leu	Thr	Met	Gly	Thr	Phe	Ser	Leu	Ser	Leu

65		70		75		80									
Phe	Gly	Leu	Met	Gly	Val	Ala	Phe	Gly	Met	Asn	Leu	Glu	Ser	Ser	Leu
			85						90					95	
Glu	Glu	Asp	His	Arg	Ile	Phe	Trp	Leu	Ile	Thr	Gly	Ile	Met	Phe	Met
		100						105				110			
Gly	Ser	Gly	Leu	Ile	Trp	Arg	Arg	Leu	Leu	Ser	Phe	Leu	Gly	Arg	Gln
	115					120					125				
Leu	Glu	Ala	Pro	Leu	Pro	Pro	Met	Met	Ala	Ser	Leu	Pro	Lys	Lys	Thr
	130					135				140					
Leu	Leu	Ala	Asp	Arg	Ser	Met	Glu	Leu	Lys	Asn	Ser	Leu	Arg	Leu	Asp
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Gly	Leu	Gly	Ser	Gly	Arg	Ser	Ile	Leu	Thr	Asn	Arg				
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<210> 6277

<211> 1206

<212> DNA

<213> Homo sapiens

<400> 6277

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<210> 6278

<211> 399

<212> PRT

<213> Homo sapiens

<400> 6278

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Gly	Val	Lys	Leu	Met	Asp	Phe	Gln	Ala	His	Arg	Arg	Gly	Gly	Thr	Leu
			20					25					30		
Asn	Arg	Lys	His	Ile	Ser	Pro	Ala	Phe	Gln	Pro	Pro	Leu	Pro	Pro	Thr
		35					40					45			
Asp	Gly	Ser	Thr	Val	Val	Pro	Ala	Gly	Pro	Glu	Pro	Pro	Pro	Gln	Ser
	50					55				60					
Ser	Arg	Ala	Glu	Ser	Ser	Ser	Gly	Gly	Gly	Thr	Val	Pro	Ser	Ser	Ala
65					70					75					80
Gly	Ile	Leu	Glu	Gln	Gly	Pro	Ser	Pro	Gly	Asp	Gly	Ser	Pro	Pro	Lys
			85						90					95	
Pro	Lys	Asp	Pro	Val	Ser	Ala	Ala	Val	Pro	Ala	Pro	Xaa	Glu	Lys	Gln
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Gln	Ser	Asp	Ser	Ile	Trp	Pro	Lys	Ser	Ala	Pro	Gly	Ser	Cys	Trp	Leu
		115				120						125			
Pro	Pro	Ala	Leu	His	Gly	Pro	Pro	His	Asn	Ala	Ala	Gly	Pro	Ser	Pro
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His	Thr	Leu	Arg	Arg	Ala	Val	Lys	Lys	Pro	Ala	Pro	Ala	Pro	Pro	Lys
145					150					155					160
Pro	Gly	Asn	Pro	Pro	Pro	Gly	His	Pro	Gly	Gly	Gln	Ser	Ser	Ser	Gly
			165					170					175		
Thr	Ser	Gln	His	Pro	Pro	Ser	Leu	Ser	Pro	Lys	Pro	Pro	Thr	Arg	Ser
		180					185						190		
Pro	Ser	Pro	Pro	Pro	Ser	Thr	Arg	Ala	Ser	Leu	Gln	Ala	Ser	Pro	Pro
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Pro	Pro	Pro	Ser	Ser	Gln	His	Pro	Gly	Gly	Thr	Pro	Xaa	Ser	Leu	Ser
	210					215						220			
Pro	Ile	Gln	Ala	Pro	Asn	His	Pro	Pro	Pro	Gln	Pro	Pro	Thr	Gln	Ala
225					230					235					240
Thr	Pro	Leu	Met	His	Thr	Lys	Pro	Asn	Ser	Gln	Gly	Pro	Pro	Asn	Pro
			245					250						255	
Met	Ala	Leu	Pro	Ser	Glu	His	Gly	Leu	Glu	Gln	Pro	Ser	His	Thr	Pro
		260					265						270		
Pro	Gln	Thr	Pro	Thr	Pro	Pro	Ser	Thr	Pro	Pro	Leu	Gly	Lys	Gln	Asn
		275					280						285		
Pro	Ser	Leu	Pro	Ala	Pro	Gln	Thr	Leu	Ala	Gly	Gly	Asn	Pro	Glu	Thr
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Ala	Gln	Pro	His	Ala	Gly	Thr	Leu	Pro	Arg	Pro	Arg	Pro	Val	Pro	Lys

305		310		315		320									
Pro	Arg	Asn	Arg	Pro	Ser	Val	Pro	Pro	Pro	Gln	Pro	Pro	Gly	Val	
		325		330		335									
His	Ser	Ala	Gly	Asp	Ser	Ser	Leu	Thr	Asn	Thr	Ala	Pro	Thr	Ala	Ser
		340		345		350									
Lys	Ile	Val	Thr	Asp	Ser	Asn	Ser	Arg	Val	Ser	Glu	Pro	His	Arg	Ser
		355		360		365									
Ile	Phe	Pro	Glu	Met	His	Ser	Asp	Ser	Ala	Ser	Lys	Asp	Val	Pro	Gly
		370		375		380									
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385				390		395									

<210> 6279

<211> 2795

<212> DNA

<213> Homo sapiens

<400> 6279

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 <211> 619
 <212> PRT
 <213> Homo sapiens

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 Arg His Lys Phe Thr Gly Lys Lys Val Thr Glu Glu Leu Leu Thr Asp
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Arg Ser Glu Lys Cys Ser Leu Gln Ala Ala Ala Ile Leu Asp Ala Asn
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Pro Cys Lys Pro Leu Phe Phe Asp Leu Ala Leu Asn His Val Ala Phe
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<210> 6281

<211> 741

<212> DNA

<213> Homo sapiens

<400> 6281

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<211> 162

<212> PRT

<213> Homo sapiens

<400> 6282

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			100					105					110		
Asn	Gln	Arg	Ala	His	Leu	Leu	Asp	Asn	Thr	Glu	Arg	Leu	Glu	Arg	Ser
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<210> 6283

<211> 2312

<212> DNA

<213> Homo sapiens

<400> 6283

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<211> 122

<212> PRT

<213> Homo sapiens

<400> 6284

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			20					25					30		
Lys	Pro	Ile	His	Val	Phe	Phe	Gly	Ala	Ala	Ile	Leu	Ser	Leu	Ser	Ile
		35					40					45			
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	50					55				60					
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Ile	Leu	Leu	Ala	Ser	Ser	Trp	Lys	Arg	Pro	Glu	Pro	Gly	Ile	Leu	Thr
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<211> 2542

<212> DNA

<213> Homo sapiens

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<210> 6286

<211> 57

<212> PRT

<213> Homo sapiens

<400> 6286

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<210> 6287

<211> 1674

<212> DNA

<213> Homo sapiens

<400> 6287

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<211> 269

<212> PRT

<213> Homo sapiens

<400> 6288

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 Ser Val Lys Leu Asp Glu His Ile Ile Pro Leu Gly Ser Met Ala Ile
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 Ile Phe Glu Leu Asp Ser Cys Asn Gly Ser Gly Lys Val Cys Leu Val
 115 120 125
 Tyr Lys Ser Gly Lys Pro Ala Leu Ala Glu Asp Thr Glu Ile Trp Phe
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 Tyr Tyr Arg Leu Leu Ile Thr His Leu Gly Leu Pro Gln Trp Gln Tyr
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 Met Tyr Lys Pro Ile Thr Tyr Asn Thr Asn Leu Leu Thr Glu Glu Thr
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 Asn Lys Ile Val Ile Pro Lys Lys Lys Gly Pro Val Gln Pro Ala Gly
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<210> 6289

<211> 1321

<212> DNA

<213> Homo sapiens

<400> 6289

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<213> Homo sapiens

<400> 6290

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<211> 2718

<212> DNA

<213> Homo sapiens

<400> 6291

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<211> 497

<212> PRT

<213> Homo sapiens

<400> 6292

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Leu	Ser	Arg	Pro	Gln	Pro	Pro	Pro	Asp	Pro	Leu	Leu	Leu	Gln	Arg	Leu
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<210> 6293

<211> 750

<212> DNA

<213> Homo sapiens

<400> 6293

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 115 120 125
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<211> 399

<212> PRT

<213> Homo sapiens

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Thr	His	Tyr	Phe	Leu	Arg	Leu	Leu	His	Asp	Lys	Gly	Leu	Leu	Leu	Arg
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Thr	Val	Cys	Gln	Arg	Pro	Phe	Pro	Gly	Glu	Asp	Ile	Arg	Ala	Asp	Val
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Met	Ala	Asp	Arg	Val	Pro	Arg	Cys	Pro	Val	Cys	Thr	Gly	Val	Val	Lys
		275					280					285			
Pro	Asp	Ile	Val	Phe	Phe	Gly	Glu	Pro	Leu	Pro	Gln	Arg	Phe	Leu	Leu
		290				295					300				
His	Val	Val	Asp	Phe	Pro	Met	Ala	Asp	Leu	Leu	Leu	Ile	Leu	Gly	Thr

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 325 330 335
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<210> 6297

<211> 472

<212> DNA

<213> Homo sapiens

<400> 6297

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<210> 6298

<211> 146

<212> PRT

<213> Homo sapiens

<400> 6298

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 35 40 45
 Arg Cys Met Gln Cys Asp Ala Lys Phe Asp Phe Leu Thr Arg Lys His
 50 55 60
 His Cys Arg Arg Cys Gly Lys Cys Phe Cys Asp Arg Cys Cys Ser Gln
 65 70 75 80
 Lys Val Pro Leu Arg Arg Met Cys Phe Val Asp Pro Val Arg Gln Cys
 85 90 95
 Ala Glu Cys Ala Leu Val Ser Leu Lys Glu Ala Glu Phe Tyr Asp Lys

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Gln	Leu	Lys	Val	Leu	Leu	Ser	Gly	Lys	Asp	Gly	Cys	Pro	Ala	Gln	Ser
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<212> DNA

<213> Homo sapiens

<400> 6299

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<211> 372

<212> PRT

<213> Homo sapiens

<400> 6300

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Ser	Gly	Gly	Pro	Arg	Arg	Ser	Arg	Gly	Gly	Gln	Pro	Ala	His	Trp	Pro
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Asp	Val	Ser	Leu	Pro	Gln	Ser	Glu	His	Lys	Glu	Pro	Trp	Phe	Met	Arg
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Ile	Ser	Asp	Tyr	Asp	Gln	Ile	Ile	Asp	Tyr	Val	Glu	Arg	Thr	Phe	Thr
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Ala	Arg	Val	Leu	Gln	Tyr	Arg	Glu	Leu	Leu	Asp	Ala	Leu	Pro	Met	Asp
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Ser	Glu	Pro	Tyr	Leu	Ser	Lys	Gln	Lys	Lys	Leu	Met	Ala	Lys	Ile	Leu
	210					215					220				
Glu	His	Asp	Asp	Val	Ser	Tyr	Leu	Lys	Lys	Ile	Leu	Gly	Glu	Leu	Ala
225					230					235				240	
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Gly Asp Ile His Thr Thr Leu Leu Ser Ala Val Ile Pro Asn Ala Phe				
	325		330	335
Arg Leu Val Lys Arg Lys Pro Pro Ser Phe Phe Gly Ala Ser Phe Leu				
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Lys Lys Tyr Ile				
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<210> 6301

<211> 911

<212> DNA

<213> Homo sapiens

<400> 6301

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<212> PRT

<213> Homo sapiens

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Glu Ser Leu Lys Lys Lys Ile Gln Pro Lys Leu Ser Leu Thr Leu Ser
      35           40           45
Ser Ser Val Ser Arg Gly Asn Val Ser Thr Pro Pro Arg His Ser Ser
      50           55           60
Gly Ser Leu Thr Pro Pro Val Thr Pro Pro Ile Thr Pro Ser Ser Ser
      65           70           75           80
Phe Arg Ser Ser Thr Pro Thr Gly Ser Glu Tyr Asp Glu Glu Glu Val
      85           90           95
Asp Tyr Glu Glu Ser Asp Ser Asp Glu Ser Trp Thr Thr Glu Ser Ala
      100          105          110
Ile Ser Ser Glu Ala Ile Leu Ser Ser Met Cys Met Asn Gly Gly Glu
      115          120          125
Glu Lys Pro Phe Ala Cys Pro Val Pro Gly Cys Lys Lys Arg Tyr Lys
      130          135          140
Asn Val Asn Gly Ile Lys Tyr His Ala Lys Asn Gly His Arg Thr Gln
      145          150          155          160
Ile Arg Val Arg Lys Pro Phe Lys Cys Arg Cys Gly Lys Ser Tyr Lys
      165          170          175
Thr Ala Gln Gly Leu Arg His His Thr Ile Asn Phe His Pro Pro Val
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<211> 676

<212> DNA

<213> Homo sapiens

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<212> PRT
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35 40 45
Asp Ser His Leu Trp Lys Leu Leu Asp Arg His Ala Asn Thr Ile Arg
50 55 60
Leu Phe Val Leu Leu Pro Glu Gln Ser Pro Val Ser Tyr Ser Lys Arg
65 70 75 80
Thr Ala Tyr Gln Lys Ala Gly Gly Asp Ser Gly Asn Val Asp Asp Asp
85 90 95
Cys Glu Arg Val Lys Gly Pro Val Gly Ser Leu Lys Ser Val Glu Ala
100 105 110
Ile Leu Glu Glu Ser Thr Glu Lys Leu Lys Ser Leu Ser Leu Gln Gln
115 120 125
Gln Gln Asp Gly Asp Asn Gly Asp Ser Ser Lys Ser Thr Glu Thr Ser
130 135 140
Asp Phe Glu Asn Ile Glu Ser Pro Leu Asn Glu Arg Asp Ser Ser Ala
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<212> DNA
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<211> 474

<212> PRT

<213> Homo sapiens

<400> 6306

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			20					25					30		
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Ile	Val	Glu	Ala	Ser	Gly	Gly	Gly	Ala	Phe	Leu	Val	Leu	Pro	Leu	Ser
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Pro Lys Arg Gly Leu Asp Val Asn Lys Cys Glu Ile Ala Arg Phe Phe		
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	340	345
Lys Ser Asp Leu Phe Gln Asp Asp Leu Tyr Pro Asp Thr Ala Gly Pro		
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Glu Ala Ala Leu Glu Ala Glu Glu Trp Phe Glu Gly Lys Asn Ala Asp		
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Pro Ile Leu Ile Ser Leu Lys His Gly Tyr Ile Pro Gly Lys Asn Arg		
385	390	395
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	405	410
Asn Lys Lys Cys Asp Leu Ile Ser Ile Pro Lys Lys Thr Thr Asp Thr		
	420	425
Ala Ser Val Gln Asn Glu Ala Lys Leu Asp Glu Ile Leu Lys Glu Ile		
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<210> 6307

<211> 2119

<212> DNA

<213> Homo sapiens

<400> 6307

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<210> 6308

<211> 483

<212> PRT

<213> Homo sapiens

<400> 6308

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 50 55 60
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 Asp Tyr Ala Arg Cys Ser Lys Asn Thr Ala Trp Pro Tyr Phe Leu Pro
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 145 150 155 160
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 Gly Lys Gln Leu Val Met Asn His Met His His Glu Asp Gln Gln Val
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 Arg Tyr Asn Ala Leu Leu Ala Val Gln Lys Leu Met Val His Asn Trp
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<210> 6309

<211> 564

<212> DNA

<213> Homo sapiens

<400> 6309

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<210> 6310

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<212> PRT

<213> Homo sapiens

<400> 6310

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 35 40 45
 Leu Arg Leu Pro Glu Pro Gln Leu Leu Pro Glu Arg Arg Val Leu Ala
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<212> DNA
<213> Homo sapiens

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<211> 234

<212> PRT

<213> Homo sapiens

<400> 6312

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Gln	Ile	Lys	Thr	Phe	Leu	Leu	His	Ser	His	Gly	Leu	Ala	His	Val	Trp
	20						25						30		
Leu	Asp	Glu	Tyr	Lys	Glu	Gln	Tyr	Phe	Ser	Leu	Arg	Pro	Asp	Leu	Lys
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Thr	Lys	Ser	Tyr	Gly	Asn	Ile	Ser	Glu	Arg	Val	Glu	Leu	Arg	Lys	Lys
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65				70				75					80		
Met	Gln	Ile	Ser	Gly	Ser	His	Ala	Lys	Pro	Gln	Gln	Pro	Ile	Phe	Val
		85						90					95		
Asn	Arg	Gly	Pro	Lys	Arg	Pro	Lys	Val	Leu	Gln	Arg	Gly	Arg	Leu	Tyr
	100							105					110		
His	Leu	Gln	Thr	Asn	Lys	Cys	Leu	Val	Ala	Gln	Gly	Arg	Pro	Ser	Gln
	115					120					125				
Lys	Gly	Gly	Leu	Val	Val	Leu	Lys	Ala	Cys	Asp	Tyr	Ser	Asp	Pro	Asn
	130					135					140				
Gln	Ile	Trp	Ile	Tyr	Asn	Glu	Glu	His	Glu	Leu	Val	Leu	Asn	Ser	Leu
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		165						170					175		
Met	Lys	Cys	His	Gly	Ser	Gly	Gly	Ser	Gln	Gln	Trp	Thr	Phe	Gly	Lys
	180							185					190		
Asn	Asn	Arg	Leu	Tyr	Gln	Val	Ser	Val	Gly	Gln	Cys	Leu	Arg	Ala	Val
	195					200					205				
Asp	Pro	Leu	Gly	Gln	Lys	Gly	Ser	Val	Ala	Met	Ala	Ile	Cys	Asp	Gly
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<210> 6313

<211> 725

<212> DNA

<213> Homo sapiens

<400> 6313

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<210> 6314

<211> 175

<212> PRT

<213> Homo sapiens

<400> 6314

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			20					25					30		
His	Pro	Ser	Thr	Asn	Ser	Leu	Leu	Arg	Glu	Gln	Ile	Ser	Leu	Tyr	Pro
			35					40					45		
Glu	Val	Lys	Gly	Glu	Ile	Ala	Arg	Lys	Asp	Glu	Lys	Leu	Leu	Ser	Phe
	50					55				60					
Leu	Lys	Asp	Val	Tyr	Val	Asp	Ser	Lys	Asp	Pro	Val	Ser	Ser	Leu	Gln
65					70					75					80
Val	Lys	Ala	Ala	Glu	Thr	Cys	Gln	Glu	Pro	Lys	Glu	Phe	Arg	Leu	Pro
					85					90				95	
Lys	Asp	His	His	Phe	Asp	Met	Ile	Asn	Ile	Lys	Ser	Ile	Pro	Lys	Gly
			100					105					110		
Lys	Ile	Ser	Ile	Val	Glu	Ala	Leu	Thr	Leu	Leu	Asn	Asn	His	Lys	Leu
		115					120					125			
Phe	Pro	Glu	Thr	Trp	Thr	Ala	Glu	Lys	Ile	Met	Gln	Glu	Tyr	Gln	Leu
	130					135					140				
Glu	Gln	Lys	Asp	Val	Asn	Ser	Leu	Leu	Lys	Tyr	Phe	Val	Thr	Phe	Glu
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<210> 6315
 <211> 378
 <212> DNA
 <213> Homo sapiens

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<210> 6316
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 6316
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 35 40 45
 Asp Glu Ala Asp Glu Lys Gly Trp Phe Pro Leu His Glu Ala Val Val
 50 55 60
 Gln Pro Ile Gln Gln Ile Leu Glu Ile Val Leu Asp Ala Ser Tyr Lys
 65 70 75 80
 Thr Leu Trp Glu Phe Lys Thr Cys Asp Gly Glu Thr Pro Leu Thr Leu
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 <212> DNA
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<210> 6318

<211> 94

<212> PRT

<213> Homo sapiens

<400> 6318

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			20					25					30		
Thr	Thr	Thr	Leu	Ser	Ser	Ala	Ser	Met	Ser	Trp	Ser	Ser	Ser	Ser	Ser
		35					40					45			
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Asp Ser Asp Ser
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What is claimed is:

1. An isolated nucleic acid molecule encoding a polypeptide comprising an amino acid sequence that is at least 85% identical to a polypeptide including an amino acid sequence selected from the group consisting of SEQ ID NO:2*n*, wherein *n* is any integer 1-3161, or the complement thereof.
2. The isolated nucleic acid molecule of claim 1, said molecule hybridizing under stringent conditions to a nucleic acid sequence complementary to a nucleic acid molecule comprising the sequence of nucleotides selected from the group consisting of SEQ ID NO:2*n*, wherein *n* is any integer 1-3161, or the complement thereof.
3. The isolated nucleic acid molecule of claim 1, said molecule encoding a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: 2*n*, wherein *n* is any integer 1-3161, or an amino acid sequence comprising one or more conservative substitutions in the amino acid sequence selected from the group consisting of SEQ ID NO: 2*n*.
4. The isolated nucleic acid molecule of claim 1, wherein said molecule encodes a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: 2*n*, wherein *n* is any integer 1-3161.
5. The isolated nucleic acid molecule of claim 1, wherein said molecule comprises the sequence of nucleotides selected from the group consisting of SEQ ID NO:2*n*-1, wherein *n* is any integer 1-3161, or the complement thereof.
6. An oligonucleotide less than 100 nucleotides in length and comprising at least contiguous nucleotides selected from the group consisting of SEQ ID NO:2*n*-1, wherein *n* is any integer 1-3161, or the complement thereof.
7. A vector comprising the nucleic acid molecule of claim 1.

8. The vector of claim 7, wherein said vector is an expression vector.
9. A host cell comprising the isolated nucleic acid molecule of claim 1.
10. A substantially purified polypeptide comprising an amino acid sequence at least 80% identical to a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: $2n$, wherein n is any integer 1-3161.
11. The polypeptide of claim 10, wherein said polypeptide comprises the amino acid sequence selected from the group consisting of SEQ ID NO: $2n$, wherein n is any integer 1-3161.
12. An antibody that selectively binds to the polypeptide of claim 10.
13. A pharmaceutical composition comprising a therapeutically or prophylactically effective amount of a therapeutic selected from the group consisting of:
 - a) the nucleic acid of claim 1;
 - b) the polypeptide of claim 10; and
 - c) the antibody of claim 12;and a pharmaceutically acceptable carrier.
14. A kit comprising in one or more containers, a therapeutically or prophylactically effective amount of the pharmaceutical composition of claim 13.
15. A method of producing the polypeptide of claim 10, said method comprising culturing the host cell of claim 9 under conditions in which the nucleic acid molecule is expressed.
16. A method of detecting the presence of the polypeptide of claim 10 in a sample, comprising contacting the sample with a compound that selectively binds to said polypeptide under conditions allowing the formation of a complex between said polypeptide and said

compound. and detecting said complex, if present, thereby identifying said polypeptide in said sample.

17. A method of detecting the presence of a nucleic acid molecule of claim 1 in a sample, the method comprising contacting the sample with a nucleic acid probe or primer that selectively binds to the nucleic acid molecule and determining whether the nucleic acid probe or primer bound to the nucleic acid molecule of claim 1 is present in the sample.

18. A method for modulating the activity of the polypeptide of claim 10, the method comprising contacting a cell sample comprising the polypeptide of claim 10 with a compound that binds to said polypeptide in an amount sufficient to modulate the activity of the polypeptide.

19. The use of a therapeutic in the manufacture of a medicament for treating a syndrome associated with a ORFX-associated disorder, wherein said therapeutic is selected from the group consisting of:

- a) the nucleic acid of claim 1;
- b) the polypeptide of claim 10; and
- c) the antibody of claim 12.

20. A method for screening for a modulator of activity or of latency or predisposition to an ORFX-associated disorder, said method comprising:

- a) contacting a test compound with the polypeptide of claim 10; and
- b) determining if said test compound binds to said polypeptide,

wherein binding of said test compound to said polypeptide indicates the test compound is a modulator of activity or of latency or predisposition to an ORFX-associated disorder.

21. A method for screening for a modulator of activity or of latency or predisposition to an ORFX-associated disorder, said method comprising:

- a) administering a test compound to a test subject at an increased risk ORFX-associated disorder, wherein said test subject recombinantly expresses a polypeptide encoded by the nucleotide of claim 1;

- b) measuring expression the activity of said protein in said test subject;
- c) measuring the activity of said protein in a control subject that recombinantly expresses said protein and is not at increased risk for an ORFX-associated disorder; and
- d) comparing expression of said protein in said test subject and said control subject, wherein a change in the activity of said protein in said test subject relative to said control subject indicates the test compound is a modulator or of latency of predisposition to an ORFX-associated disorder.

22. The method of claim 20, wherein said test animal is a recombinant test animal that expresses a test protein transgene or expresses said transgene under the control of a promoter at an increased level relative to a wild-type test animal, and wherein said promoter is not the native gene promoter of said transgene.

23. A method for determining the presence of or predisposition to a disease associated with altered levels of a polypeptide of claim 11 in a subject, the method comprising:

- a) measuring the amount of the polypeptide in a sample from said subject; and
- b) comparing the amount of said polypeptide in step (a) to the amount of the polypeptide present in a control sample,

wherein an alteration in the level of the polypeptide in step (a) as compared to the control sample indicates the presence of or predisposition to a disease in said subject.

24. The method of claim 23, wherein said subject is a human.

25. A method for determining the presence of or predisposition to a disease associated with altered levels the nucleic acid molecule of claim 1 in a subject, the method comprising:

- a) measuring the amount of the nucleic acid in a sample from the mammalian subject; and
- b) comparing the amount of said nucleic acid in step (a) to the amount of the nucleic acid present in a control sample,

wherein an alteration in the level of the nucleic acid in step (a) as compared to the control sample indicates the presence of or predisposition to said disease in said subject.

26. The method of claim 25, wherein said subject is a human.

27. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject polypeptide of claim 10 in an amount sufficient to alleviate or prevent said pathological condition.

28. The method of claim 27, wherein said subject is a human.

29. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject nucleic acid molecule of claim 1 in an amount sufficient to alleviate or prevent said pathological condition.

30. The method of claim 29, wherein said subject is a human.

31. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject antibody of claim 12 in an amount sufficient to alleviate or prevent said pathological condition.

32. The method of claim 31, wherein said subject is a human.

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